EPRC ECONOMIC POLICY RESEARCH CENTRE

30 YEARS ANNIVERSARY

# AGRICULTURAL FINANCE YEAR BOOK

## 2022

Towards climate responsive agricultural finance in Uganda

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**About this series**

The Yearbook presents views collected from various stakeholders within and outside the agricultural and finance sectors. The authors have synthesized and documented these views and provided recommendations and conclusions with the aim of improving the state of agricultural finance in Uganda. The articles presented in this Yearbook and the views expressed therein are those of the author(s).

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# LIST OF ABBREVIATIONS AND ACRONYMS

| | |
|---|---|
| aBi | Agricultural Business Initiative |
| ACF | Agricultural Credit Facility |
| ADC | Agribusiness Development Centre |
| AFYB | Agricultural Finance Yearbook |
| AGI | Agro-Industrialisation |
| AI | Artificial Insemination |
| AIC | Agricultural Insurance Consortium |
| ALG | Agricultural Loan Guarantee |
| ARTs | Assisted Reproductive Technologies |
| AU | African Union |
| BoU | Bank of Uganda |
| CAADP | Comprehensive Africa Agriculture Development Programme |
| CARI-EA | Competitive African Rice Initiative in East Africa |
| CBR | Central Bank Rate |
| COVID | Coronavirus Disease |
| CDO | Cotton Development Organisation |
| CGS | Credit Guarantee Scheme |
| CIs | Credit Institutions |
| CMA | Capital Markets Authority |
| CPI | Consumer Price Index |
| CSO | Civil Society Organisation |
| DDA | Dairy Development Authority |
| DeCoRM | Development of Rice Markets in Eastern Uganda |
| DGL | Diners Group Limited |
| DLG | District Local Government |
| ECGS | Export Credit Guarantee Scheme |
| EPRC | Economic Policy Research Centre |
| ESG | Environmental, Social and Governance |
| FAOSAT | Food and Agriculture Organisation Statistics |

| | |
|---|---|
| FBOs | Farmer-Based Organisations |
| FI | Financial Institution |
| FINCA | Foundation for International Community Assistance |
| FinTech | Financial Technology |
| FY | Financial Year |
| GIZ | Deutsche Gesellschaft für Internationale Zusammenarbeit |
| GoU | Government of Uganda |
| HS | Harmonised System |
| ICT | Information and Communications Technology |
| IsDB | Islamic Development Bank |
| MAAIF | Ministry of Agriculture, Animal Industry and Fisheries |
| MDAs | Ministries, Departments and Agencies |
| MDIs | Microfinance Deposit-Taking Institutions |
| MFIs | Microfinance Institutions |
| MoA | Memorandum of Agreement |
| MoFPED | Ministry of Finance, Planning and Economic Development |
| MoU | Memorandum of Understanding |
| MSC | Microfinance Support Centre |
| MTIC | Ministry of Trade, Industry and Cooperatives |
| NDC | Nationally Determined Contributions |
| NDP | National Development Plan |
| NPA | National Planning Authority |
| NPK | Nitrogen, Phosphorus and Potassium |
| PBB | Programme-Based Budgeting |
| PDM | Parish Development Model |
| PFI | Participating Financial Institution |
| PIAP | Programme Implementation Action Plan |
| RFIs | Regulated Financial Institutions |
| RGIL | Responsible Governance of Investments in Land |
| SACCOs | Savings and Credit Cooperative Organisations |
| SIMPO | Security Interest in Movable Property Registry System |

| | |
|---|---|
| TGCU | The Grain Council of Uganda |
| UAIS | Uganda Agricultural Insurance Scheme |
| UBoS | Uganda Bureau of Statistics |
| UDB | Uganda Development Bank |
| UDC | Uganda Development Corporation |
| UFFE | Uganda National Farmers Federation |
| UGX | Uganda Shilling |
| UNBS | Uganda National Bureau of Standards |
| URSB | Uganda Registration Services Bureau |
| USAID | United States Agency for International Development |
| USD | United States Dollar |
| UWRSA | Uganda Warehouse Receipt System |
| VBA | Village-Based Agent |
| VSLA | Village Saving and Loan Association |
| WRS | Warehouse Receipt System |

# EXECUTIVE SUMMARY

This Agricultural Finance Yearbook 2022, the twelfth edition in the series, offers in-depth analysis of the agricultural financing landscape in Uganda. It comprises 25 articles arranged in six chapters, underscoring ideas, products and innovations, processes, achievements, challenges and possible policy options, moving forward.

Chapter one explores existing policy and legal frameworks and their effect on accessing agricultural financial services. It reveals lack of an elaborate legal and regulatory framework for facilitating agricultural credit guarantee schemes, agricultural leases and other financial products targeted at increasing lending to smallholder farmers. Hence Government needs to become proactive and design clear and enabling policies and legislations; monitor and enforce them; and regularly review and update them.

The second chapter highlights recent innovations in agricultural finance, their implementation and impacts so far. The digital innovations have shown great potential to increase smallholder access to finance. For this reason, Government has to investment in digital literacy and digital infrastructure, specifically internet accessibility and power supply in the rural areas, and incentivize the private sector to do similarly.

Chapter three looks at financing of selected agricultural value chains of sugarcane and rice, the new Parish Development Model and the country's warehouse receipt system. The analysis reveals that Government has the duty to identify, popularize and protect farmer-friendly and effective financing models; always meet its obligations in public-private partnerships fully and timely; and prioritise investment of the meager resources and follow up with supportive value chain-specific inputs.

The fourth chapter addresses various green financing and related cross-cutting issues, such as how to fast-track risk mitigation policies in agribusinesses, attract global climate financing and funding its Nationally Determined Contributions requirements. It is revealed that fintechs and agri-techs are convenient and cost-effective tools in green financing; good results are reaped when Government and private sector promote environmental, social and governance (ESG) policies and 'do no harm' principles in all economic activities; and that the country stands to benefit by incorporating local, national and global approaches and regulatory standards to climate change.

Chapter five gives updates recent efforts by Government and non-government actors to manage agricultural risks and risks in lending to agriculture. The last chapter focuses on Uganda's agro-industrialisation programme and how it has fared under the transition from the sector-based budgeting approach. It is revealed that agro-indutrialisation is more than an agricultural activity, involving several ancillary sectors and, therefore, requiring massive human capacity building and capitalization of public investment and development arms.

# CHAPTER 1:
# POLICY

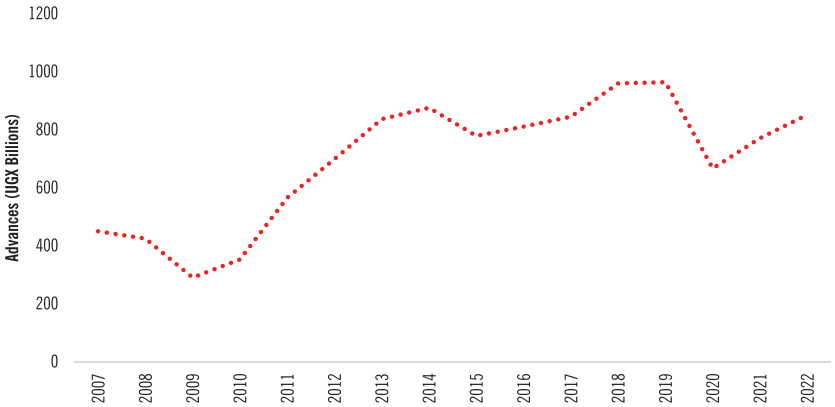
## 1.1 Trends in agricultural lending and leasing

Brian Sserunjogi

This article examines trends in total agricultural lending; the level of participation of Bank of Uganda-regulated financial institutions (RFIs) in agricultural lending; the deepening of agricultural lending as reflected in the numbers of RFIs; and disbursements made to different segments of the agricultural value chains and actors.

Though agricultural sector loan disbursements have recovered following the lifting of the COVID-19-induced lockdowns, the amount has not exceeded the pre-COVID-19 levels (Figure 1).

**Figure 1: Total agricultural lending recovers but not to pre-COVID-19 level**



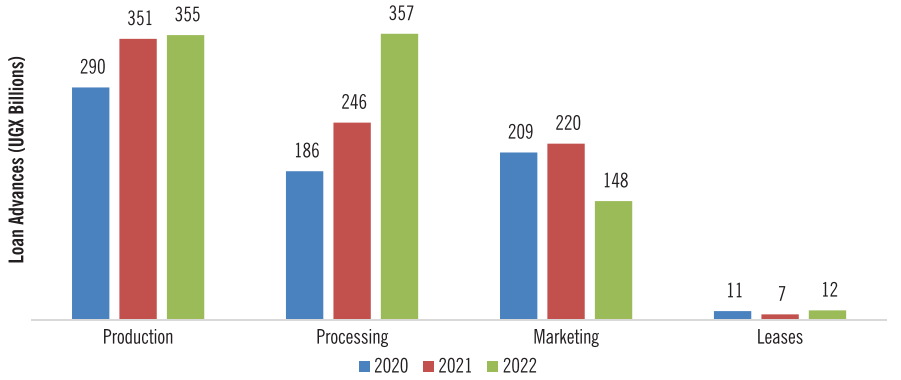

Source: Author's construction based on BoU database

Commercial banks continue to dominate lending to the agricultural sector, contributing 60 percent, especially in the processing part of the value chain. MDIs and Credit Institutions continue to dominate the financing of agricultural production by smallholder farmers. Agricultural leasing has remained meagre compared to other agricultural lending activities. Whereas credit towards production and processing has been increasing, credit flow towards agricultural leasing has remained very little.

Since the lifting of the COVID-19 lockdown, agricultural credit flow towards production, processing and leasing registered significant recoveries, credit flow to agro-processing registered the highest recovery in agricultural loan disbursements and almost doubled, from UGX 186 billion in 2020 to UGX 357 billion by December 2022. Credit flow towards production increased by 22 percent from UGX 290 billion in 2020 to UGX 355 billion by December 2022. However, the credit flow towards agricultural leasing was only UGX 10 billion for 2022.

This poor performance stems from a legal and regulatory framework that treats agricultural leases under the general banking laws, which treatment presents enforcement challenges. The existing legal framework focuses on loan recovery which when applied to leases, strains lessor-lessee relationships and ends up in loss of leased assets or failure in recovery. Also, unfavourable tax laws for leases associated with the inability of lessors to claim capital allowances on leased assets constrains growth of agricultural leasing. In addition, because of capacity gaps, particularly limited local leasing expertise within Uganda's financial sector, banks prefer to offer asset loans rather than leases. So, overall, private sector credit for the agriculture sector remains low as Figure 2 below shows.

**Figure 2: Private sector credit for agricultural leasing remains persistently low**




Source: Author's computation based on BoU database.

The credit tenure for the agriculture sector remains largely short-term, largely maturing in less than one year. Although new short-term credit repayable in less than one year declined by 28 percent, from UGX 296 billion in 2021 to UGX 212 billion in 2022, it still contributed 48 percent of total new agricultural credit disbursement by 2022. Meanwhile, medium-term credit to the agriculture sector repayable within three years grew by 20 percent, increasing from UGX 147 billion in 2021 to UGX 177 billion in 2022, but long-term credit repayable in period exceeding

three years stagnated at UGX 53 billion in the last three years.

The arrival of the COVID-19 pandemic in 2020 led to financial technological (fintech) innovations for new loan disbursements and repayments, and reduction of numbers of commercial bank branches and automated teller machines; the rate of restoration of branches and ATMs pos-COVID-19 is not encouraging. Moreover, over the years, the total number of regulated financial institutions in the country has been almost static.

Overall, lending to the agriculture sector remains highly risky despite past Government interventions to de-risk it and attract private credit. A recent EPRC study points out that banks and other RFIs are little attracted to agricultural de-risking programmes, such as the ACF, due to lengthy loan write-off processes, and to lack of legal framework for the operation of credit guarantee schemes.

## Policy options

The following policy options may be urgently considered:

(i) Reducing the cost of accessing agricultural credit and increasing the scope and reach of credit by deepening the use of digital channels in the disbursement of credit. This would involve expanding internet connectivity and infrastructure, reducing the cost of internet and power, ensuring power reliability, and reducing taxes on smartphones to enable farmers' easy and quick increase uptake of credit through new digital channels.

(ii) Easing and streamlining taxation related to agricultural leases and putting in place robust legal and regulatory frameworks for agricultural leases that will make it easier for regulated financial institutions to issue leases. Commercial banks too should undertake skilling of their staff on leasing.

(iii) Streamlining the working of agricultural credit guarantee schemes, by putting in place elaborate legal and regulatory framework.

(iv) Incorporating lower-tier (Tier IV) financial institutions in the delivery of the Agricultural Credit Facility loans. This will entail working with the Uganda Microfinance Regulatory Authority to link registered microfinance institutions with the Bank of Uganda regulated financial institutions.

## 1.2 Guaranteeing agricultural finance in Uganda: The need for a robust legal and regulatory framework for agricultural credit guarantees

Enid Kiiza

Uganda's regulated financial institutions have been largely stable especially since the 1993, with the review and enactment of banking laws and subsequent reforms. Hence the financial sector is often hailed for its stability and successful performance at the macro level, characterised by low levels of non-performing assets, and regular legal framework reviews aimed at enhancing prudential oversight and bringing more of the semi- and informal financial sector players under effective oversight. However, the financial sector is not efficient enough to release substantial liquidity to the banking sector and channel it to the productive enterprises especially in agriculture. For many years, private sector credit growth has remained below 10 percent on year-on-year basis (BoU, 2022). Bottlenecks such as poor agricultural practices, limited access to and low quality of extension services, low use and quality of improved inputs, insecure land ownership and high post-harvest losses raise the risk of lending to agriculture.

Many creditworthy entrepreneurs continue to suffer financial exclusion. The situation is worse in the agriculture sector, as evidenced by performance indicators of low use of improved inputs, negative total factor productivity growth, slow output growth, unemployment, and low and stagnant incomes. To address the above situation, Government collaborated with private sector players to establish Credit Guarantee Schemes (CGSs), whereby a guaranteeing agency/guarantor stands in to enable a borrower without enough collateral to get a loan. The guarantor promises to make good the payment should the borrower default. So, the lender takes on otherwise risky lending with assurance while the borrower accesses credit at better collateral and more suitable tenure terms.

Therefore, a CGS incentivizes a lender to finance risky entrepreneurs that would have otherwise been shunned. This translates into increased financial inclusion as more enterprises can now access credit. A robust legal and regulatory framework is crucial if this recent policy is to become more effective, far-reaching and long-lasting. An effective credit guarantee scheme (CGS), whether for individual persons/enterprises or covering a whole loan portfolio, requires diligent design and implementation. Designing a CGS requires consideration of many parameters such as the degree of guarantee coverage; the targeted beneficiaries and sectors for the guarantees; the fees to be charged; and links between the guarantee and other interventions such as

technology, innovation and new skilling.

Credit guarantees in Uganda started in the late 1990s; however, by 2007, the only two schemes – the Export Credit Guarantee Scheme (ECGS) and the USAID-funded DCA Guarantee Programme – had closed shop. While the ECGS had a higher percentage of guarantee coverage per loan and was more targeted, the DCA Guarantee Programme had broader scope and more flexible terms. Out of the five banks accredited to benefit from the ECG Fund, only two (both foreign-owned then) participated. The main bottlenecks of the ECGS were exclusion of the bigger exporters of traditional crops (coffee and cotton) which were not eligible under the Export Refinance Scheme (ERS); the short guarantee cover period of a maximum of 180 days; the volumes and types of documentation required; and the guarantee cover being in Uganda shillings while most of the ERS loans were USA dollar-denominated.

In recent years, Government launched new financing initiatives to cater for agribusinesses that are unable to access formal credit. The initiatives include (i) the BoU-administered Agricultural Credit Facility (ACF) and its credit guarantee window (ACFCG); (ii) various programmes under Uganda Development Bank which, unlike for most commercial banks, are offered at more affordable interest rates of 10 to 12 percent per annum and longer-term tenures of up to 15 years; (iii) the Emyooga scheme which targets women, youth and enterprise clusters; and the Agricultural Loan Guarantee (ALG), managed by the Agribusiness Initiative (aBi) Trust.

It is clearly observable that the new schemes did not learn much from the old ones. The similarities between the old CGSs (i.e Export Credit Guarantee Scheme and DCA Guarantee Programme) and current CGSs (i.e. ALG and ACFCG) include: (i) running two concurrent CGSs that have overlaps in terms of products offered, target clients/sectors, and participating institutions; and (ii) the CGSs operating without policy or legal/regulatory frameworks that can improve their effectiveness, outreach and sustainability. The experience of CGSs in Uganda begs for more reform and creativity. The country lacks a clear policy and legislation that can boost and protect CGSs, yet CGSs require legislation that guarantees them independent legal entity and stipulates adequate capitalization and effective supervision.

## Policy options

There is urgent need for a specific legal and regulatory framework for agricultural credit guarantee schemes, with special consideration of the following:

(i) Each of the three parties in a CGS must bear responsibility of ensuring that the credit

provided fits into the eligibility criteria, is suitable for the borrower and is repaid;

(ii) Adequately define all CGS-related terminologies, such as "guarantee origination fees", "lock-up period", "portable guarantees", etc. to ensure that all parties understand them the same way;

(iii) Recognise that a guarantee is superior to physical collateral; i.e., it is easier and quicker to process and to liquidate when default occurs; and that guarantees do not require valuation, verification, safe-keeping and maintenance. The lender and bank regulator should recognise this during appraisal and loan loss provisioning and sharing;

(iv) The treatment of guarantees in the balance sheet should conform to and be consistent with agreed standards such as those of the International Accounting Standards Board or the International Accounting Standard 39;

(v) Borrowers should be represented on the relevant CGS committee, as participation of borrowers in CGS organs reduces moral hazards and information asymmetries; and

## 1.3 Islamic financing and supporting Uganda's agribusiness sector: Progress, prospects and challenges

Sulaiman Lujja

Historically, the Islamic finance system was developed to promote cooperation between the lender and borrower, and to abolish interest payment (*Riba*) and excessive uncertainty (*Gharar*), which all together have been partly responsible for financial crises. Islamic finance is not a religious service or obligation but, rather, the provision of financial services in accordance with *Shari'ah* commercial principles which aim to cater for the welfare of both the borrower and the larger society.

The Islamic finance system is based on four key principles: (i) wealth must be generated from legitimate trade and asset-based investments; (ii) investments should generate social and ethical benefits for the wider society beyond pure returns; (iii) risk should be shared; and (iv) all harmful activities should be avoided. Under the Islamic banking model, a bank sources funds from its depositors. It then uses these funds in only *Shari'ah* complaint modes of financing that require risk-sharing financing. Profits generated are shared between the bank and the depositors in a pre-agreed ratio.

In 2017, the Government of Uganda pioneered the Islamic finance system, by implementing it through the Microfinance Support Centre (MSC). The service is not yet implemented through

commercial banks. Since MSC lends at lower rates to micro-level financial institutions, which it uses as its implementing partners, the service can ably reach poor Ugandans at the grassroots level. As the implementing agency, MSC is in the process of adopting Accounting and Auditing Organisation for Islamic Financial Institutions standards and establishing a *Shari'ah* supervisory committee, to be able to harmonise its Islamic finance practices with international standards.

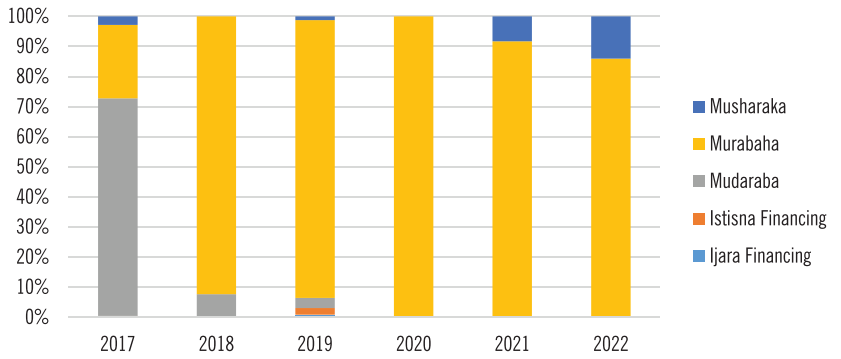
In 2016, the Islamic Development Bank (IsDB) partnered with the MoFPED, Ministry of Local Government and the Microfinance Support Centre, whereby MSC was mandated to implement Islamic microfinance financing in IsDB-funded projects. These projects are implemented under Islamic finance principles in 17 districts. Among the IsDB projects that have been implemented by MSC are the Rural Income and Employment Enhancement Project (RIEEP) worth USD 9.7 million; component B of the Local Economic Growth Support (LEGS) Project worth USD 10.43 million; and the recently approved Strengthening the Economic Resilience of the Vulnerable Enterprises (SERVE) Project worth USD 10 million.

These projects are operated on a revolving credit arrangement where funds are paid back with a minimal *Shari'ah* compliant return on investment to cover operational costs. The projects are implemented over three years; and upon successful completion, IsDB will either renew them or approve other responsive projects upon GoU request. In September 2022, the IsDB's Board approved a USD 100 million energy sector public-private partnership project in Uganda, and USD 295 million in the sustainable transport sector. These IsDB interventions are aimed at enhancing transport infrastructure, enabling access to markets, boosting tourism and supporting agricultural commodity value chains to improve productivity and connect local value chains to global ones.

## Five financing modes

By December 31, 2022, over UGX 84 billion of funds injected into the Microfinance Support Centre (MSC) as the Islamic finance had been disbursed by MSC to over 316 projects in the country. These funds were disbursed to various portfolios under five financing modes (Figure 3 below), including (i) M*usharaka* (Profit-and-loss sharing partnership) financing, under which about three percent of MSC's Islamic finance portfolio has been disbursed to eight implementing partners; (ii) *Murabaha* (Cost-plus mark-up sale) financing, under this financing, approximately 74 percent of MSC's Islamic finance portfolio has been disbursed to 256 institutions; and (iii) *Mudaraba* (Profit sharing partnership) financing, where about 23 percent of MSC's Islamic

**Figure 3: MSC Islamic finance portfolio according to the different financing modes**




Source: Author's construction based on Microfinance Support Centre 2022 Report.

finance portfolio has been disbursed to 52 implementing partners.

Others are (iv) *Istisna'* (Manufacturing sale) financing, under which only 0.7 percent of MSC Islamic finance portfolio has been disbursed to eight implementing partners; and (v) *Ijara* (Lease) financing, where only one client participated, taking up 0.2 percent of the Islamic finance portfolio. *Murabaha* financing is the dominant mode; and over 90 percent of the projects financed under it were in agriculture and related sectors.

## Challenges

Through the five years of MSC's implementation of Islamic finance, the following challenges have been experienced and lessons learnt to improve the service in future:

(i) **Transparency.** The ideal Islamic financial products that fulfil the objectives of *Shari'ah* (the profit-and-loss-sharing products) mainly depend on trust. Majority of existing clients do not disclose correct information about their businesses, and are keen to report losses which renders the portfolio non-performing.

(ii) **Misconception about Islamic finance.** Many people wrongly think that access is limited to Muslims only, and that the initiative is meant to create a parallel *Shari'ah* framework to compete with existing legal frameworks. Also, the few people who have accessed Islamic finance think that the funds are free.

(iii) **Diversion of borrowed funds.** Due to the misconceptions about Islamic finance, clients divert funds from the initially appraised business plans to other poorly conceived projects or consumptive non-investment needs. This usually leads to default and

financial distress.

(iv) **Dispute resolution mechanisms.** Because of the limited knowledge of Islamic finance among different sectors including the judiciary, the Islamic financial products have proven dispute-ridden, due to non-standardized interpretation of *Shari'ah* doctrines applicable in Islamic financial sector. MSC is faced with the challenge of interpretation of these doctrines when resolving Islamic finance disputes. MSC still has to establish a *Shari'ah* Supervisory Committee as the reference authority for *Shari'ah* financial matters.

(v) **Delayed uptake by commercial banks due to taxes and legal obstacles**. No commercial bank has been licensed by Bank of Uganda to conduct Islamic banking business because of parity gaps that disfavour Islamic financial transactions over conventional financial transactions, and the fact that Government has not yet finalised legal amendments to allow commercial banks' participation.

### Policy options

(i) Government should establish a centralised authority about Islamic finance, to not only carry out sensitisation on Islamic finance but also intermediate parties in dispute resolutions. This would help drop non-regulated and non-standardised interpretations of *Shari'ah* doctrines at policy level, and help the population grow out of misinterpretations of *Shari'ah* doctrines that lead to disputes.

(ii) Because of the misconception that Islamic banking is free money by virtue of being interest-free, high default rates have been observed and/or are being feared. Therefore, financial institutions engaged in Islamic financial business need to limit their offering of equity-based products and instead leverage on debt-based products.

## 1.4 Extending finance to Uganda's smallholder farmers: A case of the block allocation loan product

Winfred Muliisa

Despite being the key sector of the economy and the pillar of rural livelihood, agriculture's production and productivity have traditionally been low due to factors such as limited access to finance. On top of that, commercial banks have always perceived the sector as high-risk and often shunned loan requests from the sector players. With this unfavourable background, Government established the Agricultural Credit Facility (ACF) in 2007 to address funding gaps

and increase credit access in the agriculture sector; support mechanization and increase the sector's productivity; enhance investments in value addition; and improve farm outputs and incomes of farmers. The ACF operates as a risk-sharing facility between Government and Participating Financial Institutions (PFIs), wherby both parties contribute to the Fund.

After two years of operation, Government revised the ACF scheme in 2009, and implemented it in five phases, with the goal of enabling access to the ACF funds by small-scale borrowers and bringing on board the lower-Tier Microfinance Deposit-Taking Institutions (MDIs) as participants. During phase IV (July 2011 – February 2013), the Block Allocation product was introduced to provide for small borrowers requiring small loans, and up to UGX 1.5 billion was earmarked for each PFI to enable them on-lend to small-scale agribusinesses without first submitting the individual applications to BoU.

The block allocation product of ACF was created to especially help unlock access to credit in areas with communal land tenure, and mostly for micro and smallholder farmers who would otherwise be excluded because of lacking collateral. However, the introduction of the ACF Block Allocation product did not perform as anticipated at commencement, due to various factors including high risk aversion by Tier 1 PFIs regarding lending to smallholder agricultural enterprises; high lender transactional cost; low and unprofitable credit volumes involved; lack of acceptable collateral and financial records to back loan requests; and low awareness of the product.

To improve the performance of the Block Allocation product and extend credit to areas with communal land tenure and especially micro smallholder farmers, the Block Allocation product was revised through a 2018 Memorandum of Understanding. So, BoU agreed to earmark UGX 1.5 billion for each PFI from which they would approve loans to eligible borrowers not exceeding UGX 20 million based on alternative collaterals such as chattel mortgages, cash flow-based financing and character-based loans. The cap of UGX 20 million was to minimise the default risks of the PFIs since the loans were largely unsecured. In turn, PFIs were allowed to appraise eligible borrowers and disburse loans to them before submitting the loan and refinance applications to BoU for reimbursement of the GoU contribution.

These measures led to less paperwork and less delays since appraisal processes were shortened; and this helped farmers catch up with the seasons. The Block Allocation product also targeted working capital requirements for agricultural inputs such as seedlings, fertilisers, pesticides and farm restocking, and for grain trade. The loan terms were also favourable:

low interest for production and grain trading while the maximum loan period is eight years including a maximum of three years of grace period. For the four years of performance since 2018, the Block Allocation product has registered significant progress in performance, with disbursements having increased by UGX 4.8 billion from UGX 534.5 million in 2019 to UGX 5.3 billion by September 30, 2022. Total lending under the ACF block allocation was UGX 711.5 billion as at September 30, 2022. Of the entire Block Allocation loan disbursements, farm expansion has received the highest amount of loans, at UGX 8.5 billion, constituting 82 percent, followed by agro-inputs and grain trade at UGX 912.9 million and UGX 1.03 billion, respectively.

**Table 1: Disbursements under the Block Allocation (2018-2022)**

| Period | Sep-19 | Sep-20 | Sep-21 | Sep-22 |
|---|---|---|---|---|
| Value of Loan application | 759,500,000 | 2,501,000,000 | 2,829,012,000 | 5,137,681,587 |
| GoU contribution equiv. | 495,650,000 | 1,441,800,000 | 1,654,706,000 | 2,585,840,794 |
| Total amount disbursed | 534,500,000 | 2,283,500,000 | 2,312,400,000 | 5,301,703,587 |
| GoU contribution equiv. | 354,150,000 | 1,280,150,000 | 1,362,700,000 | 2,773,551,794 |
| Recoveries | - | 526,256,669 | 556,473,332 | 1,314,824,293 |
| % of recovery against GoU contribution disbursed | 0 | 41% | 41% | 47% |

Source: BoU ACF-database

However, challenges do exist. For example, out of 33 PFIs, only five (Post Bank, Equity Bank, DFCU Bank, Centenary Bank and Pride Microfinance) are currently delivering the block allocation product, because majority PFIs still consider this category of agricultural borrowers highly risky due to lack of financial records and the high transaction costs involved in dealing with them. In addition, most of these micro borrowers have no accounts with the PFIs; even when they are saving with their village SACCOs or their VSLAs, these are outside the formal financial systems regulated by BoU and, therefore, cannot access financing under the ACF.

## Policy options

Though the ACF Block Allocation product has demonstrated its potential to enhance financial inclusion, there is urgent need to scale up women and youth access to financial products. To achieve further reduction in gender disparities in access to credit finance, the potential for ACF target-financing, portions of funds could be earmarked for specific groups, such as women

and youths, and with more flexible terms, in particular lower interest rates and sufficient grace periods need to be critically explored.

Secondly, given that most of the target beneficiaries under the ACF block allocation funding belong to SACCOs, which are not part of the PFI implementation modality, there is need to review the eligibility criteria of the ACF to incorporate Tier 4 institutions, including licensed SACCOs. Lastly, to increase ACF loan uptake by smallholder farmers, MSC and PFIs need to consider instituting urgent financial literacy training programmes for smallholder farmers, particularly on aspects of record-keeping and opening saving bank accounts to make farmers bankable and attractive to credit institutions.

## 1.5 Agricultural Credit Facility: A review of past reforms and progress during the thirteen years of implementation

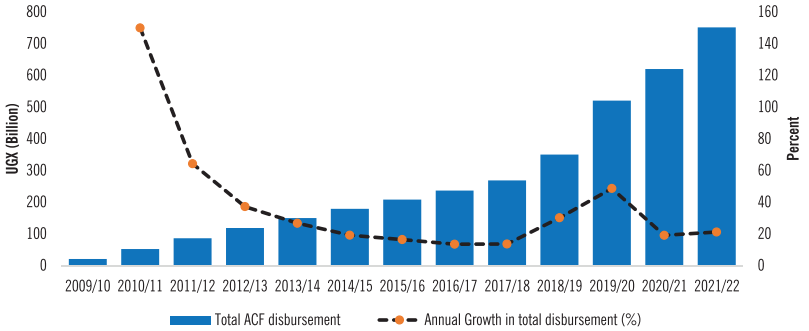
Brian Sserunjogi

In 2009, Government established the Agricultural Credit Facility (ACF) as a scheme to provide medium and long-term financing to agriculture and agro-processing. ACF is managed by BoU to extend agricultural credit through a public-private partnership arrangement. To deliver the ACF to target users, the Government partnered with Participating Financial Institutions (PFIs); namely, Commercial Bank, Microfinance Deposit-Taking Institutions (MDIs), Credit Institutions (CIs) and Uganda Development Bank.

At first, the funds were channeled to end users through the PFIs; but later in 2018, a Memorandum of Agreement (MoA) was signed between the Bank of Uganda and PFIs, whereby capitalisation of the ACF scheme was the responsibility of Government, and the PFIs were to contribute 50 percent and the MDIs 30 percent of the capital value of loans for borrowing. Under the ACF MoA, Government committed to annually contribute UGX 30 billion to the ACF scheme. However, remittances of ACF funds by Government to the BoU escrow account and subsequent transfers to the ACF capital account have been erratic, with no funding registered for four financial years. In some instances, ACF loans were disbursed off-season and hence could not be used on time. Also, the fund was undercapitalized by Government for many years, which resulted in PFIs disbursing lower loan amounts than requested by clients.

Since its inception, the facility has undergone various adjustments to address the issues of its capitalization, funding and disbursement, participation by PFIs, instruments and

**Figure 4: Annual total ACF loan disbursements**




Source: Author's construction based on data from ACF Progress Report, September 2021.

design, eligibility of borrowers and areas of focus. From its inception in 2009/10, total ACF loan disbursements increased 30-fold, from UGX 21 billion to UGX 620 billion (Figure 4). However, a 2019 study showed that the seemingly impressive cumulative growth in total ACF disbursements was due more to continuous amendments in the Memorandum of Understanding (MoU) undertaken over the years to bring certain segments and agricultural activities on board rather than to increased funding of the scheme. Thus, while GoU consistently deposited ACF funds to the BoU escrow account, the amounts deposited were largely below the UGX 30 billion set out in the MoA of 2018.

However, outstanding challenges remain that continue to constrain ACF's effective operation. For example, majority of ACF funds have been channeled through Tier 1 commercial banks, yet banks target large farms and agribusinesses involved in commodity processing, have stringent loan requirements and limited rural outreach, factors that exclude the intended smallholder farmer beneficiaries. By June 2022, approximately 75 percent of all ACF loan disbursements had been made through four commercial banks and through Uganda Development Bank, the country's development finance institution.

Even when the block allocation product was added to the ACF in 2018 so that small and medium farmers could benefit, statistics of December 2021 revealed that, only 0.98 percent of the ACF total disbursement, i.e. UGX 6.5 billion out of UGX 660.5 billion, had been advanced under block allocation three years after its inception. Therefore, the Government remains with the responsibility of devising other feasible delivery mechanisms that smallholders are more familiar with and can easily process. Such mechanisms could entail Tier 1 PFIs liaising with lower Tiers such as SACCOs and VSLAs, to deliver ACF funds directly.

Also, despite amendments and reforms to the ACF memoranda of understanding and agreement, the scope and activities to be financed gradually changed. For example, since 2013/14, the share of funds for agricultural mechanisation in total ACF disbursements declined from 59 percent in 2014 to 19.5 percent by December 2022. In contrast, financing of activities not originally prioritised in the original MoU of 2009 gained greater importance. For instance, the share of the working capital for grain trading financing in total ACF disbursements has increased from eight percent since its inception in FY2015/16 to 37 percent by FY2020/21.

While the provision of finance for grain trading under the ACF scheme was meant to enhance the domestic market of agricultural raw materials and stimulate production of grain crops in the country, grain trade draws huge loan amounts. Yet, by default, PFIs favour ACF beneficiaries borrowing for grain trading (marketing) due to the short processing duration involved, high cash flow, large sales turnover of grain trade borrowings, and the high-value collaterals (grain mills and stores) committed for the loans. It is also evident that the share of ACF financing towards post-harvest management and on-farm activities has stagnated over the years.

The ACF has also faced challenges of monitoring of processes. In 2020, the BoU amended the loan approval process in the original MoA of 2018 and introduced the requirement of additional mandatory scrutiny by its Legal Department of all ACF applications submitted to PFIs for adequacy of all collaterals. This is in addition to the independent legal security perfection by PFIs. Yet, a 2021 assessment study (by CASA) of the ACF loan application and disbursement process reported that the current loan processing structure does not provide mechanisms for feedback between the BoU Legal Department, PFIs and beneficiaries on the adequacy of all collaterals submitted for ACF loans. Moreover, the additional BoU scrutiny requirement has further encumbered the ACF loan acquisition process, particularly for smallholder farmers, causing undue delay in loans disbursement for agricultural projects.

## Policy options

The ACF needs review of its implementation, its scope and suitability to identify bottlenecks and potential areas for improvement, especially as regards loan size, tenure and scope of the facility; status and involvement of PFIs; subsector loan flows; loan security and write-offs; and loan delinquency and provisioning by BoU/GoU.

Government should urgently consider the following: (i) establishing a legal and regulatory

framework for effective operation of CGSs; (ii) establishing a separate financing framework (or fund) for grain trade since grain trade financing has outcompeted agricultural production, value addition and mechanisation in taking up ACF funds; and (iii) making a statutory instrument to enable quick write-off for ACF and other credit guarantee schemes loans.

# CHAPTER 2:
# INNOVATIONS AND REGULATED FINANCIAL INSTITUTIONS OPERATIONS

## 2.1 Promoting movable collateral for financing agriculture: The case of the Security Interest in Movable Property Registry System (SIMPO)

Linda Nakato and Stellah Kakwezi

Much as the agriculture sector is crucial in the Ugandan economy, contributing 33 percent of export earnings and 24.1 percent of the GDP in 2022, it managed to take up only 10.7 percent of total commercial bank credit, down from 12.2 percent in 2018. Given that 85 percent of people engaged in agriculture are smallholder farmers who lack collateral, lending to them is highly risky. To address this situation, Government made some reforms and innovations, such as the amendment of the legal and regulatory framework to make provisions for the acceptance of movable collateral backed up by setting up a movable collateral registry, defined as "a record of legal claims to personal property used as collateral for a loan".

In 2016, the Uganda Registration Services Bureau (URSB) embarked on legal reforms to implement the strategic intervention of developing a movable collateral registry to ease borrowing, increase the pool of new borrowers and help reduce interest rates. This led to the enactment of the Security Interest in Movable Property Act of 2019. The new Act introduced an online movable collateral registry known as the "Security Interest in Movable Property Registry System (SIMPO)".

SIMPO, which is an online registry managed by URSB, enables all kinds of lenders to register their interests over movable property that has been pledged as collateral to access credit. Movable properties under the Security Interest in Movable Property Act 2019 include tangible assets such as livestock, farm produce, farm machinery, motor vehicles, motorcycles, household items, manufacturing plants and machinery; and intangible assets such as intellectual property rights and shares in a company; negotiable instruments; investment securities; cash/ money; and documents of title.

SIMPO offers a variety of services, such as registration, amendment, cancellation and

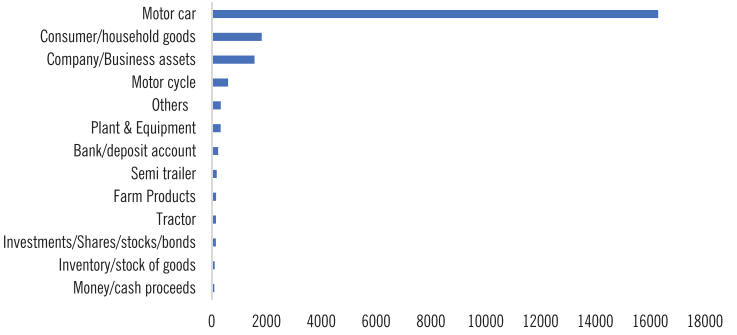
discharge of security interests and aliens in movable property. It also enables one to search on the database and establishes priority between registered competing claims on the same collateral. SIMPO innovation allows borrowers to use a range of assets, besides the traditional land and buildings, to access loans, subsequently increasing credit accessibility and reducing the cost of credit. The innovation is ideal for rural small-scale farmers and entrepreneurs who lack reliable collateral but urgently need credit to develop.

As of December 2022, the USRB registry had 16,202 security interest registrations, with noticeable jump in annual growth from 1,986 registrations in 2019 to 5,339 in 2022. Generally, there is high usage of the registry by Tier 4 financial institutions, with Non-Deposit-Taking Microfinance Institutions representing the largest share of registrations of over 62.8 percent, followed by moneylenders (19.1 percent), and commercial banks at 10.3 percent.

Efforts are being made to encourage Tier 1 institutions to lend against movable property by, for example, widening the potential asset base upon which borrowers can take loans outside risky ones. Steps are also being taken to revamp the warehouse receipt system since banks are willing to lend through this system. So far, the default rate of security interests made on the SIMPO registry is encouragingly low. Default and enforcement notices have been registered by the lenders on only 1,305 (8.1%) security interests.

The law allows for the use of various movable assets as collateral; however, only a limited range of assets are accepted by financial institutions as collateral due to high depreciation of household chattels, farm produce and livestock. As a result, motor cars are by far the most used and accepted collateral sub-type, taking up 73.9% of registrations, followed by consumer/household goods with 8.28 percent (Figure 5).

**Figure 5: Assets registered as collateral under the SIMPO (2019-2022)**




Source: Authors' own construct based on data from the URSB.

### Policy options

Government should embark on measures to de-risk agriculture-related collateral such as farm produce and livestock by bringing on board more players such as Ministry of Agriculture and Uganda Warehouse Receipt System Authority.

Given that awareness and sensitisation drives about SIMPO have so far been undertaken in only nine districts, the Government needs to roll out the awareness across the whole country. In doing this, Government need not target only farmers, but also legislators at different levels, financial institutions and Government actors or agencies, many of which are not sensitized about the innovation.

## 2.2 Broadening financing for agribusiness actors in Uganda: Experiences from the pilot off-taker partnership initiative of Centenary Bank

Asaph Besigye and Fred Migadde

Centenary Bank, with support of the European Investment Bank (EIB)'s technical assistance through the African Caribbean and Pacific (ACP) Smallholder Financing Facility, launched an off-taker partnership initiative to diversify, in a profitable way, the mechanisms for outreach for its agricultural portfolio.

Off-taker partnerships and linkages have the benefit of involving a more knowledgeable and aggregative third party, leading to more efficient financial services delivery, unlike pursuing individual clients. An off-taker partnership eases the process of screening and appraisal of clients, and serves as a mass market, reducing associated risk, costs, turnaround time and inconvenience of dealing with individual clients. It creates clear risk-minimising mechanisms through structured credit disbursement and recovery. It also helps support a strong relationship management environment between the financial institution and the smallholder clients, enabled by the referral services of the off-taker, and any necessary mediation functions in case of potential challenges such as unavoidable delays in repayments, or disruptions in the commercial operations.

Collaboration and partnerships with key third party actors in the value chain are better mechanisms that can allow for aggregation of demand for desired financial services, and for

leveraging of credit delivery support roles for client screening, credit recommendations, partial monitoring of financed clients and structured disbursement and recovery of loans. Off-takers in the value chain know better the operations of the actors they are linked to, and thus their financial service needs as well as capacities to meet their credit obligations. Hence, tapping the knowledge of off-takers is very useful for the impactful delivery of financial services.

Thus, delivery of financial services through partnerships with commodity off-takers, such as farmer cooperatives and unions, can provide effective channels that help to deepen and broaden outreach to the target actors in the value chain and, more importantly, to the smallholder farmers. It can, therefore, be pursued not only for substituting but also to complementing the conventional mechanism of engaging with individual clients. If financing through partnership with off-takers is well designed, it can help reduce access costs and inconveniences for target clients; and thus help to increase the number of on-boarded clients in the value chain.

## Survey study

To arrive at this financing model, Centenary Bank undertook a study survey of the value chains, to identify actors and activities to finance, quantify off-taker interests and evaluate the roles they can play, and assess progress and lessons learnt from the bank's ongoing financing mechanisms and from elsewhere. The resulting mapping was used to determine the off-taker linkage relationships as well as the value chain transactions that are not directly handled but support off-taker transactions, such as input supply, primary trading and delivery to the final market. So, the mapping served as a market analysis with a financing lens focused on off-taker linkages and efficiency and gaps in the functioning of these linkages.

The study helped identify potential actors and activities for financing through off-taker partnerships and how to minimise delivery cost and risk while tapping available financing opportunities. The bank also endeavoured to ascertain the off-takers' interest to engage in the proposed financial partnerships.

The key roles of off-takers in the linked farmer financing partnerships include: (i) screening and partial appraisal of the financing requirements of their linked farmers in terms of relevance, adequacy and how they match the requisite repayment capacity; (ii) aggregating the financing needs of farmers for specific requirements such as agro-chemicals, veterinary drugs, supplies, milk cans, milking buckets, farm tools and tarpaulins; and (iii) centralising procurement, where applicable, to realise the benefits of economies of scale of bulk purchase and better term

such as price discounts, delivery at the cooperative stores, assured quality, timely delivery and payment after delivery, as well as ensuring a judicious process of vetting and contracting the suppliers that should underpin good quality and reliability of supply.

Other roles are: (iv) making recommendations for farmers to the partnering bank and providing the facilities for the bank to meet them to handle financing requests; (v) undertaking follow-up of farmers that have accessed credit, including monitoring their performance at their farms and in output deliveries to the cooperative/off-taker. This helps counter attempts to side-sell through non-cooperative channels to evade the payment of credit; (vi) ensuring that payment of proceeds for the produce of farmers accessing loans is channelled through their accounts held in the bank; and (vii) collaborating on the planning and delivery of non-financial services such as financial literacy training and corporate social responsibility initiatives.

With the hitherto satisfactory potential performance of the scheme, Centenary Bank plans to: (i) further refine this pilot partnership model by realigning and tailoring the terms to match the characteristics of the transactions of the target beneficiaries; (ii) train the staff on the scheme and its procedures, and identify the best and assign them accordingly; and (iii) establish cross-cutting collaboration with off-takers and other entities whose mandates align with the objectives of the scheme, so as to achieve financial services deepening, reduced costs and risks, and robust delivery.

## Policy options

Going forward, a number of challenges need to be addressed: (i) The weak contractual arrangements and 'goodwill-promised' contracts in off-taker transactions tend to lower the ratings of lenders' asset quality; (ii) institutional weaknesses of farmers' off-taker/supplier cooperatives, especially regarding governance and management, lack of business plans and limited outreach efficiency for mobilisation and extension support, all of which lower their creditworthiness and bankability; (iii) inadequate collateral status of many off-takers/cooperatives; and (iv) the moral hazard of a popular perception that financial partnerships are a sanitizer for high risk.

## 2.3 Managing borrowers' riskiness to improve efficiency in agricultural lending: The case of FINCA's credit scoring innovation

Alice Lubwama

Financial institutions consider lending as a fundamental area of their operation, meant to generate the largest revenue for them. However, this activity is also burdened with the highest risks that lending institutions must constantly guard against and undertake various actions to minimize. Key characteristics of high-risk borrowers include poor cash-flow management and credit repayment records, lack of measures to address the challenges of geographical location and unpredictable seasonality, as well as high levels of indebtedness. So, financial institutions must be keen on evaluating client creditworthiness using various methods and credit reports from credit bureaus.

Credit scoring is one such method of estimating a person's creditworthiness, or the amount of credit risk of a customer who applies for a loan. It analyses a person's historical data and utilises various statistical techniques designed to distinguish the impact of individual characteristics of applicants that significantly affect the timely payment of their credit obligations. It generates a number called a "credit score" by means of which the financial institution can easily classify applicants into groups showing their different levels of risk. An effective scoring model is built using historical data on previously granted loans, and on key features that help in predicting the repayment ability of the borrower. Statistical models have improved the accuracy of credit decisions, making lending more cost-efficient and enabling financial institutions to make key decisions regarding a customer.

FINCA Uganda was the first financial institution in Uganda to introduce credit scoring, in 2016, after carrying out two pilot projects; in October 2014 and from May 2015 to February 2016. Soon after, the credit scoring approach, with automated credit decisions, facilitated FINCA in making more sound credit decisions and improved turnaround time on new loan approvals. This enabled gradual rollout of the system to all FINCA branches in the country.

Using either digital or manual methods at different touch points such as loan officer, customer support centre or self-help digital tools, the necessary data – including bio data, loan amount, loan purpose, collateral type if any, and farm or business data – is collected from a borrower. It is then fed into a decision engine, which analyses it and gives a score that can be used to

determine what amount of loan the applicant qualifies to receive. Then, field data collection tools are connected to the credit reference bureaus and core banking systems through Application Programming Interfaces (APIs) to obtain external data regarding a customer's previous loan obligations and current credit status. These data are then fed into the decision engine through the API where it is processed to obtain a final score that determines whether to lend, refer, or reject an application.

The credit scoring system, nevertheless, requires huge initial investment during development, implementation and sustenance; mastery of complex statistical models; and embedded capacity for upscaling and safe integration with external data sources. Hence, FINCA has invested over USD 400,000 to deepen it over five years since inception. Besides initial financial costs, smooth running of the innovation requires having a competent technical team, and picking a credit decision engine that is compatible with existing core banking systems.

The statistical models used in building credit scores can be complex and time-consuming. They require a step-by-step approach to build, test, fine-tune and apply the model for lending decisions based on a company's growth goals and risk appetite. Success requires a sufficient level of in-house expertise in advanced data analytics, or heavy investment in external consultation services.

Credit scoring has helped FINCA tailor loans to specific need categories such as active refugees and other historically underserved groups, reduce loan processing time, reduce delinquencies and defaults, and reduce the cost of underwriting loans. Credit scoring has also improved the screening out of potential high-risk borrowers, hence reducing non-performing loans and saving the bank's capital. Between 2020 and 2022, with the credit scoring, FINCA screened out 1,830 high-risk borrowers, saving the institution UGX 11.9 billion worth of bad loan advances (Table 2 below). Moreover, the great reduction of agricultural loan-processing time – from 10 days of field and desk assessments to five days for new clients, and from seven days to two days for repeat clients – had the positive effect of making the borrowing process very convenient to clients.

**Table 2: Value and number of high-risk borrowers screened (2020-2022)**

| | Number of High-risk borrowers | Value of High-risk borrower (Million) |
|---|---|---|
| Sep-20 | 252 | 1,906 |
| Dec-20 | 128 | 899 |

| | | |
|---|---|---|
| Mar-21 | 198 | 1,060 |
| Jun-21 | 196 | 1,311 |
| Sep-21 | 788 | 5,583 |
| Dec-21 | 115 | 576 |
| Mar-22 | 81 | 347 |
| Jun-22 | 41 | 195 |
| Sep-22 | 31 | 71 |
| Total | **1,830** | **11,952** |

Source: Author's compilation from portfolio analytics period ending September 2022

Credit scoring has resulted in reduced delinquencies and defaults; it enabled FINCA loans officers to negotiate better with customers regarding loan sizes/amounts and repayment terms, and to assess and manage the possibilities of customer default on repayments. This has enabled FINCA to lend to many smallholder farmers.

Like all new things, credit scoring has challenges such as borrower ignorance and fear of the unknown, privacy concerns and lack of business records. The scorecard, which relies on algorithms, still lacks the necessary flexibility to handle exceptional cases or circumstances. For example, during the COVID-19 pandemic lockdowns, many customers were flagged as high-risk and recommended for rejection by the credit scoring system because it had not been programmed for such exceptional situations.

## Policy options

Given the demonstrated benefits of credit scoring to agricultural financing, (i) Government and other stakeholders should establish a strong data storage and sharing framework to support designing, developing, deploying and using credit scoring methods. (ii) Government should support the establishment of technologies for data storage and sharing, including allowing accessibility of private entities to the national backbone infrastructure and national data centre, to reduce the cost of data transfer and cloud storage. (iii) Government, financial technology companies and industry players should develop a reliable and integrated alternative data landscape, by organising and digitalising databases, and enacting enabling laws for data and technology sharing to facilitate alternative data sourcing and integration of data sources.

## 2.4 Implementing e-agricultural extension in Uganda: The SOMA e-learning innovation

Simon Omara

Agricultural extension services are well known as enhancers of financial inclusion in the agriculture sector. Besides availing knowledge on good agronomic practices and livestock management skills to farmers, extension services have played pivotal roles by providing smallholders with the information, knowledge, guidance and links required to tap emerging agricultural financing opportunities to improve their production, productivity, marketing and incomes.

The SOMA e-learning agricultural extension service delivery, pioneered by the Agribusiness Development Centre (ADC) in 2019, has been implemented for four years now. Both mobile and web-based (at www.soma.adc.ug), it was designed to address key extension bottlenecks; namely, higher cost per learning involved in farmer training, language barriers and difficulty of accessing hard-to-reach areas. It may be accessed by Farmer-Based Organizations, Investment Clubs, VSLAs, SMEs, Academia, and any interested individuals.

Derived from the root of the Kiswahili word '*kusoma*' meaning 'to read', the platform offers free-of-charge training online; so, the user must have digital literacy, a phone number, email address, smart gadget and access to internet. ADC provided smart gadgets to use during trainings as many leaders of farmers' cooperatives and SACCOs, who are supposed to become trainers of their members, did not have them.

ADC carries out the trainings and sensitisation workshops through organised groups of farmers, traders and students (Table 3). ADC runs two learning hubs, each with eight sets of learning kits in Kyotera and Buikwe, and 10 user thin clients, but it has conducted trainings across the country. It intends to enlarge the geographical scale of implementation of the SOMA innovation.

**Table 3: Awareness creation by the ADC for the SOMA e-learning platform**

| Period of operation | Type of stakeholders | Number of workshops/forum held | | |
|---|---|---|---|---|
| | | Farmers | Other users | Regions |
| 2019 | Cooperatives, Exporters | 4 | 2 | 4 |
| 2020 | Traders, Farmers | 5 | 3 | 2 |

| | | | | |
|---|---|---|---|---|
| 2021 | Learning institutions, cooperatives, traders | 5 | 2 | 3 |
| 2022 | Learning institutions, cooperatives, traders | 6 | 10 | 4 |

Source: Adopted from the ADC report, 2022.

With over 20 activations[1] done in 2022 in Central and Northern regions, through virtual support, one-on-one engagements and regular follow-up with tele-sales which attracted over 5,000 users and 2,000 completions on different modules, ADC has learned that activations are still the best mode to deliver SOMA to all parts of Uganda because large numbers are reached and trained in minimal time and expending less resources. Using activations, farmers are mobilized and reached through their organized groups, most of which are already working with ADC in many parts of Uganda.

ADC has also reached collaboration with seven technical and higher education institutions including Makerere University, Makerere University Business School and Uganda Christian University. This has given the institutions an added advantage as well since some of their learning modules, especially for the agribusiness students, will benefit from this ADC digitisation programme, because their materials can be uploaded on the platform, thus easing access for other students. The SOMA platform fosters a convenient self-paced learning experience to users who may not easily access physical training when they are scheduled. It affords the learner opportunity to review and reference different learning points for better understanding. It also has a forum section that allows learners to discuss and share knowledge and experience.

The potential for SOMA to revolutionise the agriculture sector is immense, because it is capable of housing more content and connecting to other platforms through its easy application interface capabilities. Having started with only three courses, feedback from implementation highlighted the demand for more courses on agronomy and digitisation of courses that guide learners on marketing and financial linkages. So, ADC has accordingly integrated it with other platforms such as EASTWEST SEED and Sente Africa, to provide users with more options. ADC has also translated some of the course content originally in English into Luganda and Luo, with more local languages to be added.

Collaborating with the Content Development Support Programme (CDSP), which was created by Government to enhance creative content development, ADC has digitised and published eight courses; namely, Good Governance and Leadership; Financial Literacy for Managers; Financial Literacy for Farmers; Crop Economics; Arabica Coffee Agronomy; Robusta Coffee Agronomy;

1 Activation is the process of registering new users so that they have an active learning account on an online platform.

Climate Smart Agriculture; and Green Growth and Gender Inclusion. Enrollment onto the SOMA e-learning platform has been growing, giving the promise that with more collaboration and support, it can create greater impact. Starting with 41 users in 2019, the number rose to 117 in 2020, to 2,380 in 2021 and to 3,891 users in 2022.

### Policy options

SOMA's goal of delivering high-quality agricultural extension to every farmer in Uganda in a relatively cost-effective manner is not yet fulfilled. Addressing the challenges identified during the four years of implementation requires some policy intervention support.

Therefore, Government should: (i) create an enabling environment through the Ministry of ICT and National Guidance to disseminate information on the benefits of digital/electronic training, which will ease the intervention by ADC and other small players; (ii) intervene to equip the ADC farmer call center or establish new ones to address the challenge of online support and follow-up on users of the SOMA platform after activation to engage and support them in their practical experiences; (iii) consider digital literacy as priority investment and invest in computer hubs, smartphones, tablets and effective and affordable internet services to improve farmer readiness and access to SOMA innovation; (iv) prioritise investment in digital infrastructure, especially in internet accessibility and power supply in the rural areas where smallholder farmers are based to facilitate effective use of the platform; and (v) form public-private partnerships to accelerate and magnify the achievement the above investments.

## 2.5 Introducing alternative credit scoring among dairy cooperatives in Uganda: The case of Emata App

Haren Hald Bjorgum

Emata is a Ugandan fintech created by a partnership between Rabo Foundation, Agribusiness Development Centre (ADC) and Laboremus Uganda in 2019, with the goal of deepening financial access through digitising of cooperatives and providing affordable digital loans to smallholder dairy farmers. Its mission is to enable farmers to grow their farms and cooperatives into large businesses, and boost the dairy sector.

Created to enhance the building of electronic credit histories to ease financing of the smallholder dairy value chain, Emata automated the entire process, from data collection and

credit processing to loan disbursement, leading to instant lending decision-making. Emata has also resulted in huge gains made in farmer registration, loan performances, cost reduction, farmer identification and faster decision-making. Farmers don't have to wait for long periods to know if they will have the funds they need.

The Emata innovation has three key components or steps: (i) provision of software to dairy cooperatives to digitize their operations via a user-friendly Management Information System that unravels administrative clutter, increases transparency and allows cooperatives to make data-driven decisions. (ii) Conversion of data the data collected via the MIS and third-party weather and satellite data into credit limits tailored to each farmer. Emata achieves this by using algorithms that forecast production, income and cash available for debt service. (iii) Addressing the issue of last-mile distribution. Farmers without smartphones can use smartphones at their dairy cooperatives.

Since its launch in 2021, Emata has dealt in four value chains – dairy, oilseeds, coffee and maize – and signed over 50 cooperatives as partners, with an aggregated base of over 40,000 farmers. It has introduced loans to farmers who had never had opportunities of accessing credit. By end of November 2022, Emata had recorded UGX 1.5 billion in loan disbursement, signed 56 partners, of which 32 partners took an Emata loan and achieved 95 percent repayment rate (Table 4). Quite revolutionary, each farmer reads and signs a loan framework agreement presented in her/his local language.

Emata is renowned for same-day delivery of loans, with an average disbursal time of less than 15 minutes. This high speed and reliability has endeared Emata to farmers. Above all, the implementers of Emata were flexible enough to adjust to realities discovered through piloting and practice; it strictly relies on human-centred design principles to develop new and appropriate features and solutions.

**Table 4: Emata performance progress as of November 2022**

| Parameter | Total |
|---|---|
| Loan disbursement | UGX 1.5 billion |
| Repayment rate | 95% |
| Signed Emata partners | 56 |
| Emata partners live on lending | 32 |

Source: Emata MIS

To address the challenge of low and unreliable internet connectivity in rural areas, Emata created a user-friendly Management Information System (MIS) that is mobile and also offline, and handles multiple branches through a smart solution that periodically synchronises data. The cooperative staff does backups and syncs the system when they have access to network. The MIS also sends SMSs to farmers to confirm their milk deliveries.

Emata has developed digital champions amongst the digitally literate cooperative administration staff. The digital champions are trained by a dedicated on-the-ground Emata Impact team to assist the non-literate cooperative members. Additionally, less digitally literate members communicate with and receive information from the cooperatives and Emata via SMS, and occasional physical meetings at the cooperatives.

## Policy options

Despite its revolutionary performance in a short time, Emata still faces structural challenges, many of which beg for Government intervention. These obstacles include: (i) the lack of a favourable business environment that encourages growth of start-ups; and (ii) unnecessary high costs of doing business such as mobile money taxes which ought to be removed to promote financial inclusion. Government has duty to address the above two bottlenecks.

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# CHAPTER 3:
# FINANCING OF AGRICULTURAL VALUE CHAINS

## 3.1 Identifying input credit financing opportunities in Uganda's sugarcane sector

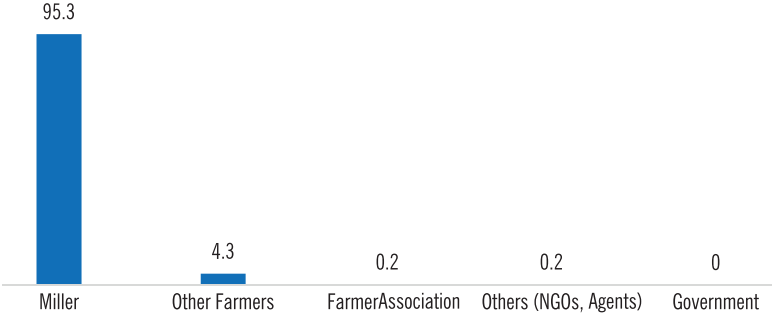
Florence Nakazi and Swaibu Mbowa

Uganda's third National Development Plan (NDP III) places sugarcane value chain among the 14 strategic commodities earmarked under the agro-industrialization programme to promote inclusive rural economic transformation and rural poverty reduction. Sugarcane production in Uganda has expanded three-fold over the last two decades, from about 1.5 million tonnes in 2000 to 5.8 million tonnes in 2020, with 37 percent of national production contributed by out-grower cane farmers. However, this growth in sugarcane production has primarily been achieved through converting more land to cane production, from approximately 20,000 ha in 2005 to over 81,000 ha in 2020, rather than investment in yield-enhancement inputs, technologies and agronomic practices.

This situation calls for input credit financing to raise productivity which has been stagnant for many years, especially given that the ongoing population expansion leads to less land for expansion of acreage under sugarcane. Therefore, there are many opportunities for financing institutions and agribusiness firms in the sugarcane value chain, given the steady growth in the number of mills that create markets for sugarcane, which has steadily expanded from four mills in 2000 to over 33 licensed mills in 2020, and the sugarcane farmers who have increased from 4,000 in 2005 to 29,000 in 2021.

The sugarcane value chain in Uganda has traditionally been structured around three mills/estates – Kinyara, Kakira and Lugazi – as nuclei with large plantations and machinery, and outgrowers whose production was small-scale. To access credit to expand acreage or improve productivity through better seedlings, fertiliser or tractor hire, the outgrowers would arrive at signed agreements with the mill/estate, whereby the latter guarantees market for cane when it is mature (at 18 months). The contract input credit financing agreements would obligate the outgrowers to sell 100 percent of registered cane to the sugar factory. This 'registered'/'aided' input credit financing mode has been the primary source of credit for over 95 percent of the farmers when they started growing cane (Figure 6).

**Figure 6: Source of support when farmers started growing cane (%)**




Source: Authors construct using EPRC Sugarcane Survey collected in 2021

With this little or no support from Government, sugarcane outgrowers have always relied on varied mechanisms, including contract financing and other formal and informal financing modalities, to finance critical production activities. However, even the dominant mode – contract input credit financing – has been on the decline due to risk exposures brought about by failures of both growers and millers to strictly adhere to contractual obligations. These failures started in 2010 with the entry of new smaller millers who did not have nucleus estates but lured outgrowers already registered with the traditional factories to side-sell cane to them. In the absence of formal regulation of the sugar industry, with the entry of new millers without nucleus estates into the market but offering higher prices, the three big traditional estates lost investment and control over outgrowers. To address the accruing nasty competition, which was derailing the sugar subsector, Government came up with the Sugar Act of 2021. By end of 2022, about 85 percent of sugarcane farmers had their fields registered with millers.

Besides the in-kind credit that estates give outgrowers, some estates have formed partnerships with Tier 1 commercial banks, whereby estate companies act as guarantors and outgrowers present their sugarcane registration certificates as substitute for collateral. Thirty-seven percent outgrower cane farmers have accessed input credit finance from commercial banks through this arrangement. For example, Kakira Sugar partnered with Tropical Bank while Kinyara Sugar Works partnered with Stanbic Bank.

Sugarcane growers also get credit from group-based channels such as SACCOs and Village Saving and Lending Associations (VSLAs), and moneylenders. A few cane growers get informal land rental financing whereby they rent land from the poor for a specific time, at a fee of between UGX 100,000 and UGX 150,000 per acre per year. However, the informality of this

arrangement often leads to disagreements between lender and borrower. The period of five years required by the lessees has sometimes forced impatient or stressed lessors, who receive the money in the first six months and consume it, into criminal actions like arson or selling the land to new owners who refuse to honour the existing lease contracts.

For institutions that undertake input credit financing, the sugarcane outgrower schemes pose great potential. It is estimated that in the 2020/21 season, the outgrower business segment generated about UGX 197 billion to household farm incomes. This revenue inflow creates a range of business opportunities, from supply of seeds and fertilizers to hiring of tractors, estimated at UGX 147 billion (Table 5).

**Table 5: Value of the sugarcane business (Billion UGX)**

| Total input costs | Buganda | Busoga | Bunyoro | All regions |
|---|---|---|---|---|
| Cane Seed | 5.7 | 18.2 | 1.2 | 25.1 |
| Inorganic Fertiliser | 1.3 | 2.0 | 1.2 | 4.4 |
| Organic Fertiliser | 0.2 | 0.0 | 0.0 | 0.2 |
| Herbicides, pesticides | 1.9 | 1.8 | 0.2 | 3.9 |
| Private extension | 0.1 | 0.2 | 0.0 | 0.3 |
| Rented land | 5.4 | 15.4 | 0.8 | 21.6 |
| Tractor hire | 2.4 | 11.0 | 2.0 | 15.4 |
| Hired labour | 20.4 | 43.9 | 11.7 | 76.0 |
| *Total value* | ***37.4*** | ***92.3*** | ***17.2*** | ***146.8*** |

Source: EPRC Sugarcane Survey (2022)

## Policy options

Going forward, the Government needs to recognise that the functionality of the sugarcane registration support system has broken down; so, Government should facilitate its revival. As an example, Government could integrate sugarcane in existing frameworks such as the Parish Development Model to reduce growers' overreliance on millers. Government should also include sugarcane in the input subsidy of Operation Wealth Creation programme.

## 3.2 Identifying investment opportunities in the Parish Development Model value chains

Harriet Conron

The Parish Development Model (PDM), launched in 2021, is Uganda's current flagship strategy for reducing poverty and moving rural households out of subsistence agriculture and entering a monetised economy by increasing production, productivity and value addition in priority commodities. Implemented at the lowest administrative level – the parish – and with 10,694 parishes in the country, the model is envisaged to bring about socio-economic transformation. The PDM has seven pillars – production; infrastructure and economic services; financial inclusion; social services; community mobilisation and mindset change; data collection; and governance and administration. The Government has come up with a list of priority commodities (Table 6) to emphasise in the programme and draft operational guidelines detailing recommended production lines for different zones and districts.

**Table 6: Parish Development Model priority commodities**

| | | |
|---|---|---|
| Coffee * | Beans * | Lemons # |
| Cotton * | Avocado * | Lettuces # |
| Cocoa * | Shea nut * | Tangerines # |
| Cassava | Cashew nut * | Sorghum # |
| Tea * | Macadamia nut * | Pineapple # |
| Oil palm * | Soya beans # | Mushrooms # |
| Maize * | Ground nuts # | Sunflower # |
| Rice * | Oranges # | Chicken (meat) # |
| Sugarcane * | Mangoes # | Chicken (eggs) # |
| Fish * | Tobacco # | Pigs # |
| Dairy * | Sesame # | Goats # |
| Beef * | Irish potato # | Sheep # |
| Bananas * | Passionfruit # | Beekeeping # |

* Appears in both Ministerial Guidance and MAAIF list
# Appears only in MAAIF list
Source: Author's construct

Facilitating investment and increasing domestic value addition in the priority commodities is necessary for the PDM to be effective in moving households out of subsistence agriculture. A simple market-based approach was used to categorise investment opportunities along PDM value chains in order to inform both private investment and Government policy. Following ITC (2021), trade data was used to rank Ugandan producers' supply capacity for PDM products and to analyse domestic and external demand for these products.

The original Ministerial Statement on the PDM specifies 18 priority commodities for development. Later on, the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF) produced draft operational guidelines which detail the recommended production lines for each district or agricultural zone. A merger of the contents of both lists gives 36 priority commodities.

Production capacity under PDM was assessed by looking at the ability of Ugandan farmers to competitively produce the unprocessed PDM products, and the rankings of products based on their supply competitiveness. In addition, higher-value added products that could be produced from raw PDM products which Uganda is already competitive in were identified, and estimate was made of the existing competitiveness of these higher-value added products. Then trade data was used to estimate supply competitiveness. If a product appears in Uganda's export data, it is considered as evidence that the product meets some of the criteria for supply competitiveness.

For a prospective financial investor, it is imperative to assess the current tradability and competitiveness of each value chain on both the domestic and the world markets, and make some projective forecasts before investing. Market size is measured using a weighted average import value for each product over the last five years of data. The mean product-market size is calculated for each (domestic or export) market; and product markets are then categorised as 'small' or 'large' based on whether they are above or below the mean in that market. The long-run annual average growth rate for each product in each market is also calculated to determine whether markets are growing or shrinking. Products deemed to have strong demand potential if either the domestic market or the global import market is large and growing (Table 7).

**Table 7: The largest growing product markets**

| External market | | | Domestic market | | |
|---|---|---|---|---|---|
| Product | Market size (USD b) | Market growth (%) | Product | Market size (USD m) | Market growth (%) |
| Soyabeans, other than seed | 76.5 | 3.2 | Semi- or wholly milled rice | 27.0 | 14.0 |
| Maize, other than seed | 39.4 | 2.9 | Broken rice | 26.6 | 1.0 |
| Boneless beef, frozen | 23.5 | 8.2 | Animal feeds, other than dog and cat food | 23.2 | 443.8 |
| Cheese and curd, other | 20.3 | 1.3 | Husked (brown) rice | 21.2 | 19,947.6 |
| Boneless beef, not frozen | 18.9 | 3.6 | Cigarettes containing tobacco | 10.9 | 1.2 |
| Dog and cat food | 18.3 | 10.7 | Green coffee, not decaffeinated | 7.8 | 167.2 |

Source: Author's construct

Majority of commercial investment opportunities in PDM value chains are in products which Ugandan producers can supply inputs for competitively, and for which there are strong external or domestic demands for the final processed products. Twelve PDM value chains were identified that meet the above criteria. For some of these value chains (cotton, dairy and tobacco), Ugandan producers are already competitive suppliers of the final products. This implies that there is already some investment in domestic processing capacity.

## Policy options

These recommendations are worth pursuing: (i) For private capital to enter the various value chains and not be 'crowded out', Government should limit itself to infrastructure investments and policy reforms that promote efficient competitiveness. This includes improving market access for Ugandan products (through negotiating trade agreements), providing low-cost standards certification options for exporters, and domestic trade facilitation reforms to reduce the time and cost of export processes. (ii) To upgrade the productivity of the value chains, Government should help producers to access capital for productivity-enhancing inputs such as tractors, hybrid seeds and fertilisers, and provide commodity-specific extension services for newer crops. (iii) Farmers may perceive newer crops to be more risky than 'traditional' value

chain crops. Therefore, increasing access to financial instruments that compensate for risk (e.g. weather-indexed crop insurance) may encourage more farmers to grow the newer crops at scale. (iv) Improving the ability of producers to supply inputs competitively will also ultimately unlock private capital to drive industrialisation in these value chains.

## 3.3 Leveraging the village-based agent model to increase competitiveness of locally produced rice

Rachel Ajambo

Despite many interventions in the rice value chain such as production schemes and new rice varieties undertaken in the past, challenges have remained. These include (i) limited investment at farmer level to facilitate higher production volumes; (ii) poor quality of supplied paddy for processing owing to poor postharvest handling; and (iii) low supply volumes translating into capacity utilisation of less than 40 percent at most mills/plants.

One recent attempt at rectifying the situation is the three-year (2019 – 2022) Competitive African Rice Initiative (CARI-EA) Project in Uganda, Kenya and Tanzania, funded by USAID through the Alliance for a Green Revolution in Africa (AGRA). In Uganda, the project was implemented using the Village-Based Agent (VBA) model, with Kilimo Trust as the implementing agent.

In Uganda, Diners Group Limited, a rice-milling SME, partnered with Bongomin Group Limited, another private SME providing training and mechanisation services via a network of youth Village-Based Agents (VBAs), and implemented the Development of Rice Markets in Eastern Uganda (DeCoRM) Project. Diners Group co-invested USD 57,000 along with the CARI-EA's USD 95,000 resulting in total project budget of USD 152,000 with a goal to: (i) increase farm level productivity from 2.9 tonnes/hectare to 4.9 tonnes/hectare; (ii) increase the quality of paddy produced by engaged farmers; and (iii) increase access to finance for engaged smallholder farmers. The project partnered three financial institutions: Post Bank, Microfinance Support Centre and Finance Trust Bank.

The project's objectives were to: (i) support the transformation of 50,000 smallholder-farming households; (ii) impact six SMEs of millers, agro-processors and suppliers of inputs and technologies, together estimated to employ about 200 people; (iii) assure the systemic change in rice market trading, with rice products, financial, inputs and knowledge systems developed; and (iv) contribute 10 percent structuring of the entire rice sector through spill-over effects.

To achieve this, the two companies mobilised 25 youth VBAs and engaged more than 7,000 smallholder rice farmers in Bulamuli, Mbale and Butaleja districts. The VBA model involves a programme deliberately targeting village agents to play the critical role of last-mile services to farmers where other value chain actors cannot reach or find the economies of scale too low to make business sense. A village agent is a local community service provider who can bridge the gap between producers and value chain actors by providing last-mile services such as inputs, extension messages and aggregation services.

Kilimo Trust on-boarded six consortia, each led by private sector actors in the rice value chain; five of which were rice milling companies and one was an inputs company. It facilitated the process of institutional capacity building among DeCoRM partners, which saw more than 7,000 paddy smallholders integrated in the supply chain of Diners Group Limited (DGL) by April 2022.

The project trained farmers on (i) good agricultural practices for rice production; (ii) farmer business skills and financial literacy; and (iii) good postharvest practices. Farmers were also provided with storage facilities to aggregate paddy. These trainings and support, combined with the assurance of guaranteed markets, enabled farmers to supply DGL with good-quality rice for milling. Consequently, DGL's annual processing volume increased from 2,000 tonnes (22 percent of its installed capacity of 9,000 tonnes) at the start of the project in 2019 to 3,000 tonnes in 2022, a 50 percent growth.

Other benefits were (i) the increased yields, accompanied by higher farmer incomes, from UGX 2.5 million/hectare (USD 681/ha) in 2019 to UGX 3.9 million/hectare (USD 1,085/ha) in 2022; (ii) creation of 25 jobs for VBAs; (iii) more than 6,000 farmers supplying paddy to DGL via structured contractual arrangements; and (iv) creation of sustainable markets for smallholder farmers.

## Policy options

The following lessons learned through the implementation of DeCoRM rice value chain support project constitute valuable recommendations for future projects and or policies:

(i) Government should consider and implement strategies promoting water for production in the rice value chain, in the context of climate change challenges.

(ii) There is need to support access to aggregation infrastructure, particularly household and central storage facilities, near the farmers who are not in well-organized irrigation schemes for bulk purchasing and further reducing transaction costs for millers.

(iii) Since millers are also a good "gateway" for financial institutions to lend to farmers, this business model should be emulated by other development partners working on access to finance for smallholder farmers.

## 3.4 Recent developments in Uganda's warehouse receipt system

Christian Baine

Warehouse Receipts (WR) are documents issued by warehouse operators as evidence that specified commodities, of stated quantity and quality, have been deposited at locations by named depositors. The depositor may be a producer, farmer group, trader, exporter, processor or any individual or body corporate. The warehouse operator holds the stored commodity by way of safe custody; implying that they are legally liable to make good any value lost through theft or damage by fire and other catastrophes but have no legal or beneficial interest in the commodity.

Inventory-based lending using warehouse receipts (WRs) in Uganda began in the 1990s where non-negotiable receipts were issued by international logistics companies playing the role of collateral managers under tripartite collateral management agreements (CMAs). Access to the CMA system in the agricultural commodity sector was restricted to relatively larger players; small-scale farmers and traders were largely excluded.

Between 1996 and 2016, the Government initiated several national initiatives to develop a more widely accessible WR system, initially targeting the coffee and cotton sectors. It also established the Uganda Commodities Exchange to support the warehouse scheme pilots in the coffee and cotton value chains. In 2000, Government, under the Plan for Modernisation of Agriculture (PMA), extended the warehouse receipts system (WRS) to cover other commodities, including maize, rice and beans. Government enacted the Uganda Warehouse Receipt System Act 2006, and established the Uganda Warehouse Receipt System Authority (UWRSA) to develop and regulate public WRS initiatives. In addition, it promoted private sector initiatives by the Uganda Cooperative Alliance to create a National Commodity Exchange to catalyse the development of receipt-based trading in agricultural commodities.

However, despite these national responses, some of the later interventions, such as creation of a WRS linked to a separate commodity exchange (COMEX), were unsuccessful. Since 2015, the Government has been making annual appropriations to the UWRSA through MTIC. The activities of the UWRSA, which are supervised by MTIC, cover four broad areas of licensing,

inspections, capacity building,and sensitisation or mobilisation of the various stakeholders. The Authority has largely focused on delivering training and skilling programmes for farmers, establishing a national management information system, training commodity handlers on the safe use of agricultural chemicals and undertaking a national survey of storage infrastructure in Uganda; although these and several others it has been implementing are not core activities required of the Authority under its mandate. Since inception in 2015, UWRSA has not licensed any warehouse facility, certified any warehouse operator or instituted an inspection regime for warehouse operators in the country; yet all these are vital to supporting inventory-based credit systems.

Government funding of UWRSA has remained insufficient and intermittent. Also, 60 percent of the allocations have gone to building of capacity for privately owned warehouses. The remaining 40 percent has been spent on setting up quality assessment laboratories; purchase of weighing equipment, including platform and bridges; purchase of moisture meters and pest management kits and equipment; strengthening the security systems and physical structures at the warehouses; and skilling the staff at the technical warehouses.

Besides Government support to the WRS, there is also donor support to it from the International Finance Corporation. In November 2022, Uganda National Farmers Federation (UFFE), Uganda Cooperative Alliance and the Grain Council of Uganda (TGCU) signed a Joint Action Plan to coordinate various activities to support the development of WRS in Uganda. Subsequently, TGCU, which has a membership of over 140 firms, 25 of which have invested in storage and processing facilities that meet WRS standards, created the Regional Grain Hub model to promote wholesome grain storage and processing systems, and to develop the capacity of especially large warehouse owners to manage large volumes of grain in an institutional framework.

The Warehouse Receipt System faces other challenges that include limited awareness about it; lack of standardized storage facilities; absence of viable cooperative societies; and lack of capacity by Uganda National Bureau of Standards to maintain and enforce standards.

## Policy options

Government should try doing the following: (i) Delink the regulatory functions of the Uganda Warehouse Receipt Systems Authority from the Uganda Commodity Exchange and establish separate governance and ownership structures for both. (ii) The UWRSA should enjoy a high level of autonomy from the Government and should have no budgetary dependency line

ministry; (iii) Amend the WRS Act of 2006 to allow private entities to issue tradeable electronic warehouse. (iv) The WRS regulations should be harmonised with those at the Capital Markets Authority to allow the establishment and operation of commodity exchanges and regulations, and attract agricultural finance to SMEs that seek to trade their commodities in these markets.

# CHAPTER 4:
# GREEN FINANCING AND OTHER CROSSCUTTING ISSUES

## 4.1 Fast-tracking integration of climate risk mitigation policies in Uganda's agribusinesses

Emmanuel Ikara and Gaston Atusiimire

It is estimated that about 40 percent of the Uganda's population relies, for their livelihood provisions, on natural resources that include land, forests, wetlands, water resources, wildlife and biodiversity. However, having one of the fastest-growing populations in the world, and given that its agriculture sector is dominated by small-scale farmers who use poor agronomical practices, leading to poor production and productivity, Uganda has an urgent task to integrate climate risk mitigation policies in its agribusiness. The best way to achieve this is to employ an environmental, social and governance (ESG) framework in its climate change mitigation strategy for agriculture and overall economic development with specific inclusion of the 'do no harm' principle on social equity.

Uganda passed the National Climate Change Act 2021 to, among other goals: (i) help operationalise the Uganda National Climate Change Policy of 2015; (ii) domesticate the UN Framework Convention on Climate Change and the Kyoto Protocol and Paris Agreement on Climate Change; and (iii) provide national mechanisms, and institutional and regulatory frameworks for coordination and implementation of climate change response measures and financing.

The Act provides for a National Climate Change Task Force to effect policy and regulation. As a member of this Task Force and regulator of the country's monetary policy and financial institutions, Bank of Uganda (BoU) is engaging the supervised financial institutions on initiatives to address environmental, social and governance (ESG) issues and standards in the financial sector. As part of its strategic plan for 2022-2027, BoU will work with financial institutions to issue climate change risk management guidelines for the agricultural sector.

The BoU strategy commits financial institutions that support the agricultural sector, to acquire requisite knowledge and resources to trigger or bolster their ESG efforts. Once these institutions instill the ESG principles among their clients in the agricultural sector, their activities and

application of the ESG will advance Uganda's efforts to address climate change resilience, agricultural productivity and economic transformation. The Microfinance Support Centre is also using ESG through providing environmental loans.

Several regulated financial institutions have or are taking on ESG as part of their internal and external corporate social responsibility (CSR) or customer relations management (CRM). Leading in this endeavour are Stanbic Bank, Centenary Bank, Equity Bank and Pride Microfinance. Also, several non-governmental institutions are engaged in Uganda's climate change mitigation efforts. Key to note is USAID whose Climate Strategy 2022-2030 emphasizes strong standards of disaster risk insurance and support for the most climate-vulnerable and marginalized groups. In dealings with SMEs, USAID stresses environmental compliance reporting. Other such players include UK Foreign, Commonwealth and Development Office and Agriculture Business Initiative (aBi) which stress green investments, whereby finance cannot be given to agribusinesses that lack ESG compliance mechanisms in their investment plans.

### Policy options

Going forward, for climate change mitigation policies to take deep roots, there is need for increased collaboration between and among Government, financial institutions, development actors and SMEs to enhance resilient agriculture, increase investments that directly benefit farmers, the rural poor and the country's overall economic and environmental wellbeing. Second, the ESG practices being implemented by some financial institutions need to be adopted and diffused at the enterprise and community levels. Third, the ESG policies should be underpinned by strong operational, monitoring and evaluation frameworks that align with the existing and upcoming national and international regulatory standards.

## 4.2 Attracting global climate financing for achieving Uganda's green growth aspirations

Tom Sengalama

Climate change is a real threat to livelihoods and economies, unless strong and consistent mitigation and adaptation measures are taken. In Uganda, an economic assessment of the possible impacts of climate change on the country by the Ministry of Water and Environment in 2015 revealed that, with no adaptive actions taken, annual climate-induced losses to the country could reach between USD 3.2 billion and USD 5.9 billion within a decade. The biggest

impact areas would be water, energy, agriculture, health and infrastructure.

The 2019 Global Commission on Adaptation Report indicates that the overall rate of return on investments in improved resilience is very high, with impressive benefit-cost ratios ranging from 1:2 to 1:10, and in some cases even higher. The World Bank estimates that, on average, the net benefit of investing in more resilient infrastructure in low and middle-income countries such as Uganda would be USD 4.2 trillion, with USD 4 of benefit arising for each dollar invested. In addition, an investment of USD 1.8 trillion in the areas of early warning systems, climate resilient infrastructure, improved agriculture and resilient water resources could generate almost USD 4 worth of avoided costs and non-monetary social and environmental benefits for every USD 1 spent. This would result in USD 7.1 trillion worth of avoided costs, and huge non-monetary social and environmental benefits.

Uganda's 2022 update on its Nationally Determined Contributions (NDC) states that the country requires USD 28.1 billion (about UGX 100.8 trillion) to implement the adaptation and mitigation actions up to 2030. Given the country's gross domestic product and development needs, this is a huge sum. The Uganda NDC implementation plan of 2022 indicates an estimated cost of USD 17.7 billion for adaptation, of which USD 2.5 billion (approx. 14%), is considered unconditional cost of implementation to be made available through the National Budget. The rest, USD 15 billion (approx. 86%), remains a conditional means of implementation that will depend on international financing and bilateral support. The country also needs strong private sector investments and financial support from both domestic and international sources.

There exist a number of sources of global financing for climate change issues that include multilateral vertical funds, multilateral development banks and the private sector. Uganda is also developing a framework and guidelines for implementation of carbon markets. Given its low carbon dioxide emissions (i.e. 0.02% of global emissions), the country has a huge potential of attracting climate financing through carbon markets.

Government established a Climate Finance Unit under the Ministry of Finance, Planning and Economic Development, and a Climate Finance Facility under Uganda Development Bank to facilitate climate change-related funding. To ably compete for global funding, Uganda plans to stick to the following priorities: (i) promoting investments in clean, renewable and efficient energy, and its use systems; and (ii) promoting biodiversity and nature-based solutions in handling energy, health, livelihood, food systems and environmental issues.

Uganda has already committed to restore 2.5 million hectares of forests by 2030. Other nature-based climate solutions include effective management and sustainable use of the fauna and flora; good documentation of improved livelihoods of local communities; and quality management of natural landscapes. The country is also promoting climate-smart agriculture in the face of land degradation, declining productivity, gender issues and land tenure bottlenecks to reduce emissions from agriculture. It is also forming internal partnerships and resource mobilisation to coordinate the private and public sectors and achieve efficient use of funds.

### Policy options

Going forward, Government may consider the following interventions: (i) De-risking private sector investment in climate actions and smart technologies. This involves using Government, bilateral and multilateral funds to de-risk private investments in climate-resilient production systems and technologies, to enable private capital to invest broadly and at large scale. (ii) Establishing a project development and management unit to support project pipelines and constantly review de-risking instruments. (iii) Establishing clear policy instruments and guidelines that attract and benefit from various sources of funding. (iv) Tapping the climate change finance facility, especially by designing and issuing green bonds.

## 4.3 Unlocking barriers to financial services access for marginalised rural savings groups: Focus on refugee communities

Emmanuel Ikara, Noah Owomugisha and Gaston Asiimire

Financial inclusion is very critical to rural growth and development. World over, most rural poor lack the ability to access financial institutions and benefit from savings, credit and insurance services to invest in their productive activities and better their livelihoods. Various barriers block such marginalized groups from accessing banking or microfinance interventions or large-scale anti-poverty and development programmes.

Refugees fall in such category. Uganda currently has a refugee population of 1.5 million. As a marginalised group, refugees in settlement areas do not easily access large formal financial institutions to get credit. Instead, majority of them rely on informal and social group institutions called VSLAs and SACCOs. In 2017/18, the United Nations High Commissioner for Refugees (UNCHR) captured some 29,000 VSLAs and SACCOs savings groups across 13

refugee settlements in Uganda. Saving groups serve social and financial purposes, and are well appreciated by refugees.

Refugees face several legal hurdles that disadvantage them. For example, some mainstream financial institutions demand a national identification document or a passport, yet refugees hardly have such documentation. They fail to access commercial banks and other mainstream sources of finance because they lack proof of income or credit history, proof of citizenship and identity proof. Given that the law in Uganda does not allow foreign-born residents to own land in the country, the few refugees who buy land do so informally and so, lack proper documents to present the land as collateral.

Refugees are also burdened by 'flight risk', being presumed to be migratory due to the cost of living, safety concerns and settlement relocation, among others. Further, strict anti-money laundering and counter-terrorism financing rules also make international banks reluctant to open accounts for customers who lack passports, even when host government directives provide that biometric cards or other government-issued identity documentation are sufficient. Refugees are considered high-risk borrowers due to lack of adequate know-your-customer information and also because even the financial institutions have limited understanding of refugee populations, especially those living outside settlements. Financial institutions often lack data on refugees' livelihoods, skill sets and even financial needs. Refugees are perceived as too dependent on donor aid and not sedentary enough to be trusted. Refugees also suffer a negative perception perpetuated by the media and even public policies. This lowers their reputation before public and private lending institutions. With highly politicized perceptions of refugees by their host communities, many of them even assume that they will not be eligible customers, or simply assume that they will not be served because they do not speak the local language confidently.

Fortunately, in conformity with the Financial Action Task Force (FATF) advice to countries to soften regulations on anti-money laundering, presently in Uganda, Tanzania and Kenya, financial service providers accept letters, known as 'peasant passports', from the local village authorities as an alternative to National Identity Cards. The few financial service providers serving refugees have also overcome legal challenges, typically by seeking prior approval and support from national authorities and Local Governments

Digitisation, especially the use of technology in digital financial inclusion, is providing innovative tools, including new identification and verification measures (e.g. biometrics, smart cards), to

create user profiles that support more effective identity verification, fraud prevention and risk-based monitoring of transactions. Whereas these technologies open new risk areas related to the need for third parties to verify account holders and remote account opening, they also offer opportunities for data gathering and analytics, which help assess the credit risk of users with no formal credit records.

Mobile banking is another game changer assisting refugees to access financial services. Mobile money is the preferred mechanism for both humanitarian aid receipt and commercial use amongst refugees and refugee-hosting communities. Opportunity should be explored to reduce transaction fees for mobile money and mobile banking to encourage more transactions.

### Policy options

Going forward, financial institutions should deploy more agents on the ground, especially in refugee settlements. Second, they should also prioritise information and communication about their financial products, explaining to them in detail and in languages understood by the majority. Third, VSLAs should be encouraged to open accounts in formal financial institutions to avoid theft and other risks which are common with VSLAs. Fourth, trainings in financial literacy and management are important to enable members of VSLAs and refugees in general to get a sense of financial knowledge and security. Lastly, promotion of mobile money and mobile banking combined with reduction of service fees would enable more refugees to use financial services and uplift their livelihoods.

## 4.4 Prerequisites for agriculture sector financing in Uganda through agri-tech platforms

Joseph Sanjula Lutwama

Uganda's agriculture sector players lack the motivation to adopt better agronomical practices to maximize and optimize quality, yields and output. The small-scale nature and the high levels of informality of Ugandan agriculture make it susceptible to climatic shocks and market volatility of demand and supply, with persistent uncertainties and fluctuation of agricultural prices and markets. Consequently, agricultural earnings and incomes are very unpredictable, thereby rendering farming much riskier to finance. So, majority of farmers are not attractive to financial institutions which require low risk, large-scale, long-term borrowers that can provide secure, large and stable outlets for lending, with solid collateral and credit histories.

Agri-tech platforms have high potential of aggregating and connecting players in Uganda's agriculture sector, which is characterized by small scale, high fragmentation, spatial scatter, subsistence, low skill sets and lack of specialization. These platforms leverage technology to build networks among a multiplicity of actors required to deliver more long-term sustainable agricultural financing solutions. Technology reduces costs of interaction between the different actors, while increasing levels of transparency and integrity with digital trails of all transactions in an ecosystem.

Agri-tech platforms bring to the agriculture finance ecosystems huge capabilities and advantages, such as: (i) Economies of scale, by aggregating outputs of many smallholder farmers into much bigger volumes that not only reduce unit costs of accessing markets but also enable bargaining for better prices. (ii) Economies of scope, whereby agri-tech platforms can provide a wide range of bundled services that are critical to both agricultural development and agricultural financing. With one digital wallet at a single composite cost, a farmer can make payments for agricultural inputs and receive payments for harvests supplied, save, take out a loan, and access agricultural insurance and a wide range of other value-added services. (iii) Agri-tech platforms collect huge data on farmers, making risk-based approach to credit decision possible.

Despite the high potential of agri-tech platforms to boost agricultural finance ecosystems, there is still the challenge of underdeveloped or insufficient data ecosystems. Yet the agri-tech platforms would thrive where there is sufficient data, not only agricultural data but also non-agricultural data, to make more comprehensive and robust farmer and borrower profiles. Secondly, financial and digital illiteracy levels in the country are very high. Thirdly, unsustainable business models dominate the Ugandan market. Majority of agri-tech platforms use the one-dimensional business model rather than creating and linking networks among various actors.

## Policy options

Given the above situation, three policy actions are important: (i) Adopting policies, actions and systems that raise the national financial and digital literacy levels. Beyond authoring a strategy, Government should also fund structures and systems necessary to implement the strategy; (ii) Ensuring universal access to reliable and affordable internet. This will require, among other things, strengthening the competition policies and regulations in the telecommunications sector as the leading provider of internet services. (iii) Providing an enabling environment that facilitates universal access to affordable digital tools, including removing taxes on all digital tools, or even subsidising them.

# CHAPTER 5:
# MANAGING AGRICULTURAL RISKS

## 5.1 Uganda Agriculture Insurance Scheme: An update on implementation progress

Munyaradzi Daka

Much as Uganda is a major crop and livestock producer and exporter in the region, with huge potential to play a much bigger food supply role, its agricultural production potential is increasingly being exposed to various risks which include the ever-changing and unpredictable climate extremes of long drought, excessive rainfall, floods and landslides, hailstorms, and pests and diseases of crops and livestock. While building climate change resilience and mitigation measures will help, agricultural insurance is very critical.

Government established the Uganda Agricultural Insurance Scheme (UAIS) in FY2016/17 as a five-year pilot scheme operating under a public-private partnership arrangement. The objective was to cushion farmers against production losses and to mitigate financial losses suffered from natural disasters. Under the scheme, the Government of Uganda annually provided UGX 5 billion premium subsidy on agriculture insurance with a view to encouraging farmers to buy agricultural insurance cover for their crops and livestock, in addition to enabling them attract financing for their agricultural enterprises. This scheme has created effective insurance portfolios that are affordable and achievable across the country. Aiming to reach the neediest farmers, UAIS has been implemented through direct farmer interface, farmer cooperatives, SACCOs, Area Cooperative Enterprises (ACEs), Village Saving and Loan Associations (VSLAs), and financial institutions by insurance of loans being disbursed purposely for agricultural production, and by insurance companies through their countrywide branches and broking fraternities.

Government arrived at a partnership with Agro Consortium, through which it pays the premium and to which the farmers also pay their basic premiums. Government subsidises the insurance premium by 50 percent for small-scale farmers and 30 percent for large-scale farmers, except in areas prone to natural disasters where the Government contribution is 90 percent and 80 percent in other areas considered being high-risk. Under the scheme, the basic premium is a proportion of the total value of insured crops or livestock, of which farmers pay to Agro Consortium from two to six percent of the total value of the crops/livestock insured.

There are two broad types of insurance products provided under the UAIS: (i) multi-peril/risk insurance and (ii) weather index insurance. As at the end of FY 2020/21, UGX 15.2 billion was paid out in claims. A disaggregation by claims pay-outs reveals that multi-peril crop insurance accounts for more than half (56%) of the total claims, followed by crop weather index insurance (32.3%) and poultry insurance (7.4%). This is not surprising because Uganda's crop agriculture is faced with multiple risks which are covered under the multi-peril insurance. Moreover, multi-peril insurance is more comprehensive than the other insurance products. Overall, there has been tremendous growth in the number of farmers insured under the UAIS subsidy scheme across all regions, and in the number of insurance types or claims. This is attributed to nationwide farmer group trainings and robust media campaigns.

In a bid to promote agricultural insurance, Government has emphasized tax exemption on UAIS, by removing Value Added Tax in May 2019 and Stamp Duty in 2022. With these tax exemptions and other progressive changes brought about by MoFPED, agricultural insurance has become more affordable to subsistence farmers, thereby cushioning them against the risks of changing weather patterns. The country has also seen steady growth and increase in the number of farmers insuring their agricultural investments over the years, with dramatic increase in the participation of small-scale, low-income farmers who were previously most affected by tax obligations.

## Policy options

i. Because of the quick success of UAIS, the turnaround time for inspection has been affected, with increased number of inspections being done by limited number of assessors and loss adjusters, and delaying processing of applications. There is need for specialist service providers to keep pace with the ever-growing insurance demand to uphold efficient management of farm inspection and claims management processes.
ii. Structural changes and adaptability measures need to be constantly devised and implemented to ensure that farmers are shielded from escalation of costs caused by increased unpredictability of climatic conditions and weather. Further, farmers must be trained in the use of weather prediction programmes and tools so that they can predict weather and appropriately plan their field operations in a way that reduces their risks.
iii. More resources are needed to promote agricultural insurance literacy, mass training and awareness creation to make agriculture insurance sink deeper in the population.
iv. Lastly, to meet the growing demand and needs, Government should raise the annual insurance subsidy beyond the present UGX 5 billion.

## 5.2 Implications of the Russia-Ukraine war on Uganda's fertiliser and wheat supply

Justine Luwedde and Florence Nakazi

Given that Uganda is a net importer of wheat (96 percent) and fertilisers (100 percent), the war that broke out between Ukraine and Russia in February 2022 has affected Uganda's economy. Russia and Ukraine are major global exporters of wheat, fertilisers and oil and gas. The war has had deep implications of supply disruptions and price rise transmissions, both of which affected Uganda's supply and use of fertiliser and wheat. It led to limited supplies and higher prices of wheat and fertilisers on the global market, thereby having implications on Uganda's farmers, food production and availability, and agricultural exports. Many agro-industrialisation activities and food-based businesses that use wheat as an ingredient were adversely affected.

Since March 2022, Uganda faced a downward trend in total supply of NPK fertilizers, while the global shortage of NPK fertilizers grew. Before the war, Uganda was importing 30 percent of its fertilizer from Russia but this share dropped to around 28 percent between March and September 2023, with dramatic increases in prices.

Uganda was only able to import 50 percent of its NPK fertilizer needs in July 2022. This was possible because of the United Nations and Turkey's Black Sea Grains Initiative which allowed Ukraine to export fertilizers to other countries to overcome the supply crisis. From March to August 2022, the global price for NPK fertiliser increased by 22 percent, because shipment from both countries was disrupted. The fertilizer price shock adversely affected poor and rural households, and majority of them ended fertilizer use for their crops. The lowered production and productivity seriously affected agricultural household income earnings in the country. It also affected plantations and producers of large-scale crops such as sugarcane, oil palm, maize, sunflower and soybean that use a lot of inorganic fertilizers. There were reports that sugarcane millers even stopped offering fertilizer input loans to out-growers.

Prior to the outbreak of war, over 22 percent and 17 percent of Uganda's total wheat imports (671,859 tonnes) came from Russia and Ukraine in 2021, respectively. The war changed the volume of wheat imports into Uganda, with imports from Ukraine significantly declining from USD 10 million in December 2021 to zero in January 2022, before recovering to USD 2 million in September 2022. While for Russia there were no wheat imports between December 2021 and May 2022, and imports rebounded to USD 11 million by July 2022 only to drop afterwards.

The rise in domestic wheat prices has had a negative impact on consumers of wheat-related products, reflected in increase in the prices consumers must pay. Between March 2022 and February 2023, the Consumer Price Index (CPI) for wheat flour increased by 22 percent, while the CPI for chapattis, one of the local wheat flour products, increased by 16 percent. Government advised farmers to grow more cassava as a substitute in making pastries and chapattis.

### Policy options

Going forward and given that the war does not show signs of ending soon, Government should: (i) Revisit its plan of revamping the Tororo fertiliser factory to locally produce fertilisers; (ii) Leverage public-private partnerships and introduce bulky procurement of both wheat and fertilisers, so that even if the crisis still exists, it has reserves to meet short-term demands; (iii) Revive, promote and support the local growing of wheat in Kapchorwa and other suitable areas; and (iv) Design and operationalise the national food reserve system as a mechanism to stabilise Uganda's food supply and prices, and to ensure domestic food availability and affordability.

## 5.3 De-risking Uganda's agro-manufacturing subsector: Experiences from Uganda Development Corporation

Mildred Barungi and Teo Nanyange

The Government of Uganda spells out promoting industrialization as one of the key strategies for ensuring socioeconomic transformation as stipulated in the Uganda Vision 2040. The current NDP III (2020/21 – 2024/25) aims to increase value addition in the key growth opportunities of agriculture, industry, knowledge and ICT, tourism, minerals, and oil and gas. However, Uganda's agro-manufacturing remains very limited despite the agriculture sector employing over 68 percent of the country's labour force. One of the key challenges limiting growth of agro-manufacturing is the high cost of financing; the others are high costs of industrial infrastructure; limited availability of technical and managerial skills; limited industrial research, innovation and technology transfer; heavy reliance on imported inputs; high energy tariffs; and low capitalization of the Uganda Development Corporation (UDC), the Government's industrial and development investment arm.

In 2016, Uganda reestablished the Uganda Development Corporation (UDC) through the Uganda Development Corporation Act 2016. Its mandate includes funding the agro-manufacturing

subsector; however, it is still poorly capitalized. Besides its seed capital from appropriations made by Parliament through the National Budget, UDC is expected to generate its own earnings from subsidiary and associated companies or investments. These subsidiary investments are still few and in infancy with little financial returns.

In supporting industrial development, UDC uses three financing arrangements: equity financing, lease financing and shareholder loan financing. The Corporation has invested in some agro-industries, through equity, shareholder loans and leasing, and saved a number of factories from foreclosure arising from heavy indebtedness and lack of working capital. UDC plays a catalytic role in the national economy, and de-risks private investments in agro-manufacturing and other key industries. This is achieved through prioritising projects that the private sector is either unable or unwilling to execute for reasons that include: heavy capital requirement; low or slow returns; and where goods and services to be produced are of a public nature.

In the area of agro-industrialisation, UDC has so far invested in nine agro-industries in five sub-sectors of fruits, tea, cassava, cotton and sugarcane. Equity financing is the dominant financing type being used by UDC; and three out of the six companies where UDC is an equity shareholder have received shareholder loans. Lease financing is the least used, and has been extended to only two agro-industries in the tea subsector.

The three financing models of UDC come with several benefits such as: (i) patient capital. UDC makes financial investments in businesses but does not expect earning quick profits. It will forgo immediate returns provided the expected future returns from the investment make business sense, and the investment offers benefits to communities such as employment and ready market for locally produced agricultural raw materials. The Corporation does not demand for dividends as an equity shareholder until the subsidiary or associated company is able to generate sufficient net profits; and (ii) de-risking previously indebted enterprises. When UDC invests in such enterprises, it boosts their creditworthiness, so that they can easily acquire loans from commercial banks.

Other benefits are: (iii) no collateral requirement for shareholder loans and finance leases; (iv) relaxation of cash constraint for high-capital investments, since UDC's finance investment acts as start-up capital for the enterprise; (v) good governance resulting from UDC select staff being involved in the management and operations of investment entities by representation on boards of the investment; and (vi) no threat of company capture. UDC's exit strategy guarantees security against capture because the goal of UDC investment in nascent or struggling companies is to

support and build up to a stage of maturity and exit.

However, UDC's experience has exposed certain challenges, including: (i) slow positive returns; (ii) limited facilitation to investee companies because of UDC's own low capitalisation; (iii) non-prioritisation of Government in repayment of shareholder loans; and (iv) the wrong mindset of 'Government money is free money', by which some investee companies that receive shareholder loans have the wrong perception that they will not be required to pay back.

### Policy options

The following key lessons have been learnt and need to be considered as recommendations: (i) One-off financing is sometimes not enough to help businesses fully recovery. Follow-up alternative financing options like shareholder loans become inevitable and should be embedded in intervention strategies. (ii) Considering lease financing, UDC should be effectively represented on the investee company boards to take care of the Corporation's interest and ensure timely payment of rental obligations. (iii) UDC's financing needs to be accompanied with comprehensive development package for investee companies. These should include strategies for strengthening company governance; provisioning of input subsidies to ensure sustained supply of high-quality raw materials; and lowering the cost of doing business, including reducing costs/tariffs of critical inputs such as electricity to enable companies to minimize production cost.

## 5.4 Monitoring responsible agricultural investment on land in Uganda: The case of GIZ's Investment Compliance and Monitoring Tool

Anna Karolina Lamik, Christina Ketter, Daniel Kirumira and Richard Katende

A 2013 study by the then African Union-based Land Policy Initiative (LPI) revealed that commercial investments in land for agriculture, forestry and other developments can lead to loss of access to land by local communities, conflicts, inadequate compensation during resettlement and forced evictions, thereby restricting and preventing inclusive and sustainable development. International frameworks deem it imperative that all investments in land – foreign, domestic, large, and small – should be guided to ensure that they are responsible in the context of national food security.

Government of Uganda has undertaken various commitments to ensure sound land governance; however, there exist persistent challenges regarding their implementation that undermine the contribution of smallholder farmers to national safe, nutritious and sufficient food and food security.

Since 2017, the German development cooperation agency GIZ has been implementing the Promoting Responsible Governance of Investments in Land (RGIL) Project, a project of monitoring the compliance to established standards of agribusiness investments, and in Uganda locally known as the Responsible Land Policy in Uganda (RELAPU). The project aims at raising private investors' awareness about responsible land policies along internationally agreed guidelines, and in conformity with national policy and legal frameworks. The project monitors compliance through indicators on food security and nutrition; sustainable and inclusive economic development and the eradication of poverty; gender equality and women's empowerment; youth engagement and empowerment; tenure of land, fisheries and forests and access to water; managing natural resources to increase resilience and reduce disaster risks; and cultural heritage and traditional knowledge.

RGIL has supported an assessment of Uganda's policy and legal frameworks, and established that a good number of the country's applicable documents need realignment with the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security (VGGTs) 2012 and the Committee for World Food Security Principles for Responsible Investment in Agriculture and Food Systems (CFS-RAI) 2014 principles.

In 2021, RGIL developed the Investment Compliance Monitoring Tool (ICMT) with inputs from various land stakeholders. The Tool provides an opportunity for Government representatives, regulatory authorities, investors, land users, and civil society partners active in agriculture investments in land to measure and assess compliance for responsible investments based on the CFS-RAI principles. The Tool customizes international guidelines to Uganda's context to ease its voluntary use. It is used as a qualitative survey with the investor documenting their own self-reported assessment of the investment. After the investor's self-reported assessment of the investment, a site visit follows to jointly verify the statements made by the investor. After establishing areas of low compliance, the project helps build capacity through workshops, trainings and field advisory visits.

The Investment Compliance Monitoring Tool is designed to be convenient and friendly. It is

structured in a way that it can be used as a guide to award scores per section and sub-section of the tool. The scores are further weighted so that each section contributes a proportion given according to its prioritisation to overall assessment. It also contains criteria to guide the awarding so as to reduce bias by assessors. In addition, a comment section is available to provide justification or explanation behind the scores awarded.

With the first batch of assessments undertaken between July and September 2021, for 51 agriculture investments in seven districts, so far, a total of 76 investments have been assessed; with 51 of them assessed both at baseline and midterm while 25 were only assessed at midterm. Considering investment compliance assessments by district, overall, 34 out of the 76 investors assessed were able to score above 70 percent in the compliance assessment. This increased from 29 investors at baseline. Considering compliance to the principles laid out in the national and international guidelines, 38 out of the 76 investments assessed scored above 70 percent. This improved from 32 investments at baseline measured between July and October 2021. A comparative analysis of the compliance performance for the two years of the assessment shows a consistent upward trend. Though the project was in seven districts, in three regions, still it can be said that the results are a representative indicator of the country's good performance.

## Policy options

Government ministries and agencies responsible for environment, land, labour and community rights should consider it crucial to guarantee the protection of local community interests in their facilitation and promotion of agricultural investments.

Second, Government should ensure that investor training, advisory and compliance monitoring are integrated and mainstreamed into its planning, budgeting and routine activity implementation at all levels. Third, Government should provide clarity on the roles and mandates of various MDAs and those responsible for implementation at local government levels, regarding the promotion and facilitation of responsible investments in land. Fourth, Government should emphasise investor capacity enhancement through training and field advisory towards good practices for responsible investments. Fifth, Government should endeavour to review and update various policy and legal frameworks and their respective regulations to match with the current situation on the ground. Last, Government should consider investment incentives such as tax holidays, offer of serviced investment land and reduced utility tariffs to encourage adherence to compliance measures.

# CHAPTER 6:
# FINANCING AGRO-INDUSTRIALISATION PROGRAMME: SOME ISSUES

## 6.1 Can the programme-based public financing deliver Uganda's agro-industrialisation agenda?

Regean Mugume and Blessing Atwine

Uganda Vision 2040, which envisages transforming the structure of the country's economy, identifies agriculture as a key vehicle to deliver her development agenda, given the sector's contribution to employment, export earnings, economic growth and livelihood; with the sector employing about 68 percent of the population and contributing 24 percent of Gross Domestic Product. In this endeavour, agro-industrialisation is treated as a catalyst for inclusive and equitable growth, through increased export competitiveness, enhanced employment, enhanced food security critical for the livelihoods, and transformation of the agriculture sector from subsistence to commercial.

Yet many factors such as limited use of fertiliser and quality seeds and lack of irrigation infrastructure which render production vulnerable to climatic extremes and pest and disease infestations hinder Uganda's agricultural productivity. Agro-processing is also impaired by lack of quality packaging capabilities, insufficient storage facilities, poor post-harvest handling practices, shortage of agricultural credit, high freight costs, lack of all-weather feeder roads in rural areas, a complicated and inefficient land tenure system, and limited knowledge of modern production practices.

Government's review of its efforts revealed that the sector-based approach to planning and budgeting, introduced in 2008, has proved unable to effectively link sector budgets to the overriding development objectives; it was discovered that resources were being spent on low-priority projects that do not serve strategic development objectives. Hence, Government decided to transition from a sector-based to a programme-based approach to planning and budgeting under the third National Development Plan 2020/21 – 2024/25. The programme-based budgeting (PBB) aims to better align priorities and spending plans and improve value for money outcomes.

As such, the agro-industrialisation (AGI) framework is premised on the Programme Implementation Action Plan (PIAP) which sets out the various activities and resources required to deliver the AGI programme targets. The implementation and coordination of programme activities are based on an elaborate structure of Programme Leadership Committees, Programme Working Committees and Technical Working Groups, involving numerous offices and composite technical expertise from Government ministries, departments and agencies (MDAs), private sector organisations, development partners, academia, civil society and non-governmental organisations.

The arrangement is further consolidated by the private sector participating in public-private partnerships to enhance private investment in agriculture, agribusiness and agro-industries, and the centralised coordination role offered by the Office of the Prime Minister to ensure that all ministries and institutions are working together to achieve the goal of AGI. Implemented starting in the FY2020/21, AGI has created employment opportunities; led to establishment and rehabilitation of many agro-processing and value-addition enterprises for key commodities such as cotton, sugarcane and tea; increased area under irrigation; and increased the share of agricultural products in Uganda's exports. AGI's realization of its target key outcomes is presently at 54.4 percent.

However, there is slow transition to the PBB approach by different key stakeholders among MDAs and at the Local Government (LG) levels due to inadequate knowledge, negative attitude, resistance and fear of change. The programme-based budget (PBB) system is internet-based and, therefore, requires stable internet and power supply to facilitate timely data entry and submission, particularly in the rural LGs. This has hampered the timely budgeting process and budget data entry and submission.

The new PBB approach suffers from inadequate release of budgeted funds and low absorption of budgeted funds by implementing MDAs. Above all, there is limited funding of the agro-industrialisation programme, and this is worsened by delays in donor-funded projects because of lengthy and strict protocols that characterize donor funding. The contribution of private sector funding to AGI has been far lower than anticipated.

Indicative of the potential benefits of the programme, the number of jobs created in the agriculture value chain was almost twice (160,508) the original target (75,000). Also, several agro-processing and value-addition enterprises were established and rehabilitated for key priority commodities such as tea, sugarcane and cotton, which also contributed to job creation

### Policy options

Going forward, the following recommendations are worth implementing: (i) MoFPED and MAAIF need to establish and strengthen public-private partnerships to improve private sector investments in areas of value addition and irrigation schemes, among other interventions; (ii) MoPFED should train and build the capacity of Government officials at the Central and Local levels to fully understand the programmatic approach to planning and budgeting. In this respect, the PBS should be rehabilitated to avoid systematic errors and breakdown to enable timely submission of budget data by LGs; and (iii) MoFPED needs to ensure adequate and timely release of funds to the local governments to ensure implementation of AGI programme activities, especially funds to ensure the recruitment of extension workers at LG level.

## 6.2 Tracking ancillary agricultural financing for supporting Uganda's agro-industriaslisation programme

Sandra Nakabiri and Muhamad Mukisa

Traditionally, the budget allocation to the agriculture sector in Uganda has been limited only to the direct allocations towards the agriculture, in isolation of public funding of other supportive ancillary expenditures to benefit agriculture. As such, analyses commonly reported that budgetary expenditure on agriculture in Uganda averaged about three percent over the past six years before increasing to about five percent in FY 2021/22. Yet, public investments in agro-industrialisation go beyond investments in the agricultural sector only; hence the need to track the progress in public financing towards ancillary agricultural expenditure and investments that are part and parcel of requisite investments for Uganda's agro-industrialisation programme.
With the change from sector-based planning and budgeting to programme-based planning and budgeting in FY202/21, agro-industrialisation, as a programme, includes more than agriculture. It amalgamates activities previously under different sectors such as marketing, agro-processing, and research and innovation, but crucial to promoting commercialization and competitiveness.

When ancillary funding areas – infrastructure, agriculture, manufacturing, energy, transport, trade and marketing, credit facilities/ financing and skills – are taken into consideration, it becomes evident that overall allocation to agro-industrialisation (AGI) increased from four percent in 2015/16 to about 15 percent in 20202/21. AGI's reliance on transport infrastructure, energy infrastructure and physical structures in raising production, productivity, storage,

processing, access to markets and creation of opportunities for rural communities cannot be underestimated.

Since 2015, total budgetary allocation to infrastructure for the agriculture sector has increased 16-fold, from UGX 114 billion in FY2015/16 to UGX 1,885.97 billion in FY2021/22, a significant allocation skewed to funding rural electrification. Indeed, budget allocation for rural electrification rose from UGX 58 billion in FY2015/16 to UGX 1.2 trillion in FY 2020/21. Government also capitalized its development arm, Uganda Development Corporation, by expanding its direct investment by 432 percent from UGX 39.4 billion in FY2020/21 to UGX 209.7 billion in FY2021/22. In addition, Government recapitalized Uganda Development Bank. Investments for monitoring and maintenance of standards, as part of ancillary marketing support, have also expanded from UGX 3.68 billion in FY2015/16 to UGX 68.94 billion in FY2020/21. This Government commitment prioritised enforcement of product certification; regulation of cross-border informal trade in agro-products; renovation, construction and equipping certification laboratory facilities in strategic locations; and training of farmers and manufacturers on sanitary and phytosanitary standards. Government has also been extending direct funding to agriculture sector through specialized schemes and programmes such as the Agriculture Credit Facility, Emyooga, Youth Livelihood Fund, and Uganda Women Entrepreneurship Programme, among others.

Other ancillary financing agricultural financing to support AGI include those subsectors that AGI much depends on such as transport infrastructure, energy infrastructure (especially rural electrification) and physical structures. Infrastructure development plays a significant role in raising agricultural production and productivity, storage and processing, easing access to markets and creation of opportunities to improve the livelihood of rural communities. Other general credit and financing schemes also indirectly affect the performance of AGI.

Despite successes, certain challenges still need attention: (i) the limited funding for priority areas with higher multiplier effect including Uganda Warehouse Receipt System and Uganda Agricultural Insurance Scheme; (ii) delayed disbursement of approved resources to the spending entities; and (iii) communication and uptake gaps.

Whereas Government has committed significant resources, most projects are either under-performing or operating at losses; others have stalled due to inadequate working capital and, for others, funds have been channeled into projects that are at pre-investment stage or of poor governance.

### Policy options

Therefore, going forward, Government should:

(i) Increase the investments in complementary/auxiliary sectors such as increase in rural transport infrastructure, rural electrification and market infrastructure;
(ii) Ensure that the current infrastructure (both transport and energy) policies and strategies are functionally aligned with the intended agricultural investments;
(iii) Work out modalities to address the disjointed efforts of its various credit and financing schemes for proper targeting and to reduce delays in disbursement of funds;
(iv) Support close collaboration and linkages with agricultural sector institutions to guide in investment packaging and support; and,
(v) Ensure effective coordination of the different programme actors that support the agro-industrialisation programme through strengthening the monitoring and evaluation component.

## 6.3 Uganda's agro-industrialisation programme at midterm: Progress and prospects

Medard Kakuru and Grace Bwengye

Although agriculture is vital to the economy and livelihood improvement in Uganda and the vast majority of the people depend on it to a great extent, the sector is still marred with a myriad of challenges, including: (i) low production and productivity; (ii) poor storage infrastructure; (iii) low value addition; (iv) limited access to financial services and critical inputs; (v) poor market access and low competitiveness of products in domestic, regional and international markets; and (vi) poor coordination and inefficient institutions for planning and implementation of agro-industrialization initiatives.

So, to address these constraints limiting agricultural transformation in the country, the Government introduced the agro-industrialisation (AGI) programme in FY 2020/21 with the primary goal of boosting the commercialisation and competitiveness of the country's agricultural production and agro-processing. To ensure effective implementation, the AGI Programme Implementation Action Plan (PIAP) set as sub-programmes five focal areas of implementation: namely, agricultural financing; agricultural production and productivity; storage, agro-processing and value addition; market access and competitiveness; and institutional strengthening and coordination. Here below is the midterm performance of the

five sub-programmes.

(i) **Agricultural financing.** The main objective of the AGI agricultural financing sub-programme is to enhance accessibility and affordability of finance for the agricultural sector players so as boost their investment activities. The specific strategic intervention is to avail concessional long-term financing for agricultural infrastructure and capital investments. Over the period, there has been notable increase in agricultural financing, with the share of agricultural financing to total financing increasing from two percent in FY2017/2018 (baseline year) to 12.2 percent in FY2021/22. This was mainly achieved through the Government's increased capitalisation of the Agricultural Credit Facility, a risk-sharing facility between Government and participating financial institutions (PFIs) that provides affordable credit to enterprises engaged in various agricultural value chain activities.

A September 30, 2022 ACF progress report shows that disbursement of funds by both GoU and PFIs to support agriculture financing has increased in the NDP III period. Over time, ACF introduced the "Block Allocation" product to allow smallholder farmers to benefit from financing for agricultural inputs and farm expansion without the condition of the conventional collateral required by banks. Consequently, between the last quarter FY 2021/22 (April - June) and the first quarter of FY 2022/23 (July - September) alone, loans disbursed to smallholder farmers under "Block Allocation" increased by UGX 1.66 billion (184 percent).

(ii) **Agricultural production and productivity.** The 2022 NPA Mid-Term Review revealed that agriculture production growth stagnated at 4.3 percent during the past two years, mainly attributed to the slow implementation of activities earmarked to enhance agricultural production and productivity.

Interventions envisaged under this sub-programme include, among others, (a) strengthening agricultural research and technology use; (b) strengthening agricultural extension system; (c) enhancing agricultural input marketing and distribution systems; (d) increasing access and use of agricultural machinery and digital technologies; (e) increasing access and use of water for production; (f) effective management of pests, vectors and diseases; (g) strengthening farmer organizations and cooperatives; (h) promoting agricultural mechanization; and (i) improving skills, competencies and productivity of the agricultural labour force. All these components registered good

performance outcomes at the midterm.

(iii) **Storage, agro-processing and value addition.** Strategic interventions under this component include (a) establishing post-harvest handling, storage and processing infrastructure up to sub-county level; and (b) establishing functional agro-industrial parks. From the midterm review, agro-processing and value addition are on track although the pace of progress is slow.

(iv) **Market access and competitiveness in domestic and international markets.** Interventions under this sub-programme have been made to increase competitiveness, including (a) strengthening enforcement and adherence to product quality requirements; (b) digitalising acquisition and distribution of agricultural market information; and (c) improving agricultural market infrastructure in rural and urban areas.

(v) **Institutional strengthening and coordination.** The aim of this sub-programme is to put in place a coordination mechanism of the programme implementation actors both in MDAs and private sector. Among other things, Government planned to establish public-private partnership models on which the AGI can run. Performance in this sub-programme was not good largely due to the slow transition to the programme-based budgeting approach. Consequently, budget allocations are still based on the sectors.

## Policy recommendations

Going forward, the following policy recommendations are worth considering: (i) Government should prioritise increasing capitalisation of the ACF, UDB, UDC and the MSC funding schemes; (ii) The ACF Memorandum of Agreement, 2018 needs to be further amended to bring on board Tier IV savings and credit institutions to expand credit space for smallholder farmers; (iii) MAAIF should consider recruiting and deploying irrigation engineers at sub-counties to enhance the adoption of irrigation technologies by smallholder farmers; (iv) rural electrification needs to be expedited fast to enhance value addition and agro-processing; and (v) there is a need to continuously build the capacity of staff in Government ministries, departments and agencies and districts to understand and implement the programme approach.

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